

=> d his

(FILE 'HOME' ENTERED AT 13:35:26 ON 28 JUL 2009)

FILE 'REGISTRY' ENTERED AT 13:35:52 ON 28 JUL 2009

L1 STRUCTURE UPLOADED

L2 0 S L1

L3 245 S L1 FULL

=> s l3 and ed<12/18/2003

60371597 ED<12/18/2003

(ED<20031218)

L4 127 L3 AND ED<12/18/2003

=> s l4 and caplus/lc

67972949 CAPLUS/LC

L5 125 L4 AND CAPLUS/LC

=> s l4 not l5

L6 2 L4 NOT L5

=> d l-2 ide can

L6 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2009 ACS on STN

RN 295776-93-1 REGISTRY

ED Entered STN: 19 Oct 2000

CN Xanthylum, 9-[2-[[[(4S)-4-amino-4-carboxybutyl]amino]carbonyl]phenyl]-3,6-bis(ethylamino)-2,7-dimethyl- (CA INDEX NAME)

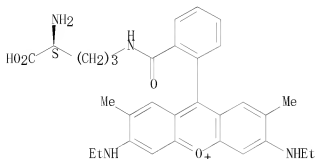
FS STEREOSEARCH

MF C31 H37 N4 O4

CI COM

SR CA

Absolute stereochemistry.



L6 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2009 ACS on STN

RN 295776-85-1 REGISTRY

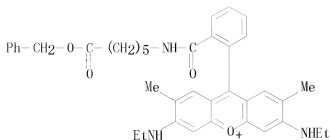
ED Entered STN: 19 Oct 2000

CN Xanthylum, 3,6-bis(ethylamino)-2,7-dimethyl-9-[2-[[[6-oxo-6-(phenylmethoxy)hexyl]amino]carbonyl]phenyl]- (CA INDEX NAME)

MF C39 H44 N3 O4

CI COM

SR CA



=> fil capl

FILE 'CAPLUS' ENTERED AT 13:39:05 ON 28 JUL 2009

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 28 Jul 2009 VOL 151 ISS 5

FILE LAST UPDATED: 27 Jul 2009 (20090727/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2009

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2009

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2009.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

The ALL, BIB, MAX, and STD display formats in the CA/Caplus family of databases have been updated to include new citing references information. This enhancement may impact record import into database management software. For additional information, refer to NEWS 22.

'FIONA' IS DEFAULT FORMAT FOR 'CAPLUS' FILE

=> s l3

L7 87 L3

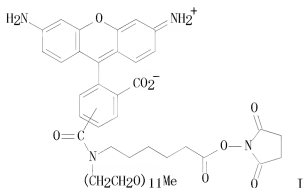
=> d l-87 bib abs hitstr

L7 ANSWER 1 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2009:767810 CAPLUS

DN 151:96479
 TI Fluorescent compounds for labeling biomolecules and cells and use in kits and assays
 IN Mao, Fei; Leung, Wai-Yee; Cheung, Ching-Ying; Hoover, Hye Eun
 PA Biotium, Inc., USA
 SO PCT Int. Appl., 157pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN. CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|--|----------|-----------------|----------|
| PI | WO 2009078970 | A1 | 20090625 | WO 2008-US13698 | 20081212 |
| | W: | AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | |
| | RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| PRAI | US 2007-13956P | P | 20071214 | | |
| GI | | | | | |



AB The present invention relates to fluorescent dyes in general. The present invention provides a wide range of fluorescent dyes and kits containing the same, which are applicable for labeling a variety of biomols., cells and microorganisms. The present invention also provides various methods of using the fluorescent dyes for research and development, forensic identification, environmental studies, diagnosis, prognosis, and/or treatment of disease conditions. Fluorescent dye I (preparation given) was conjugated with goat anti-mouse IgG and with aminophalloidin. Actin filaments were stained with phalloidin labeled with I. I conjugate was more photostable than a conjugate with Alex Fluor 488.

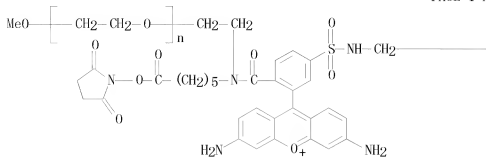
IT 1164239-34-2 1164239-38-6 1164239-41-1
 RL: ARG (Analytical reagent use); PRPH (Prophetic); ANST (Analytical study); USES (Uses)
 (as fluorescent xanthene dye; fluorescent compds. for labeling biomols.)

and cells and use in kits and assays)

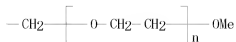
RN 1164239-34-2 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A



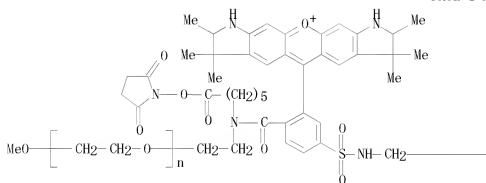
PAGE 1-B



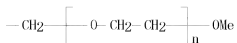
RN 1164239-38-6 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A

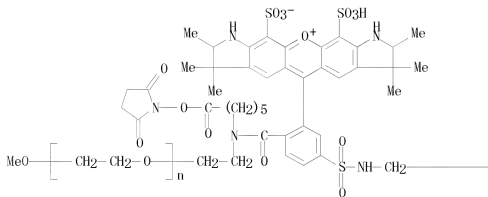


PAGE 1-B

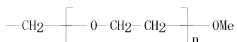


RN 1164239-41-1 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A



PAGE 1-B

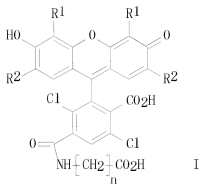


RE, CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 2009:721677 CAPLUS

TI Synthesis of yellow fluorescent dyes suitable for protein labeling
 IN Tian, Min; Wu, Xianglong; Diwu, Zhenjun; Shi, Zhen
 PA Northwest University, Peop. Rep. China
 SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 19pp.
 CODEN: CNXXEV
 DT Patent
 LA Chinese
 FAN. CNT 1

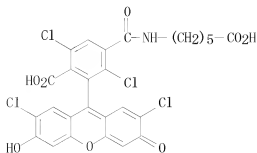
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|------------------|------|----------|------------------|----------|
| PI | CN 101451018 | A | 20090610 | CN 2007-10188464 | 20071203 |
| PRAI | CN 2007-10188464 | | 20071203 | | |
| GI | | | | | |



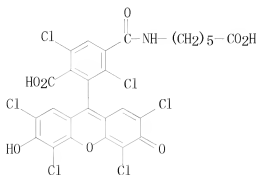
AB The yellow fluorescent dyes (I), where R1, R2=Cl, F, Br or H, n=3-7, are synthesized by steps of: (1) condensation reacting substituted resorcinol with 3,6-dichloro-5-carboxy-phthalic anhydride under acidic condition to obtain substituted fluorescein condensate; (2) esterifying with pivalic anhydride to obtain substituted fluorescein pivalate; (3) reacting with diisopropylamine to obtain substituted 6-carboxyfluorescein pivalate diisopropyl ammonium salt; (4) reacting with hydrochloric acid to obtain substituted 6-carboxyfluorescein pivalate; (5) esterifying with disuccinimidyl carbonate to obtain substituted dipivaloyl-6-carboxyfluorescein-N-hydroxysuccinimidyl carbonate and (6) substituting with C3-C7 linear amino acid.

IT 1166837-59-7P 1166837-80-4P 1166838-08-9P
 RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); IMF (Industrial manufacture); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (synthesis of yellow fluorescent dyes for protein labeling)

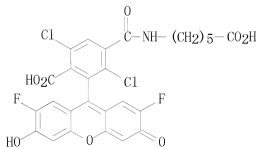
RN 1166837-59-7 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED



RN 1166837-80-4 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



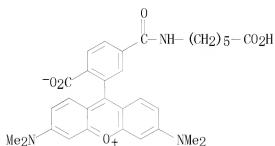
RN 1166838-08-9 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



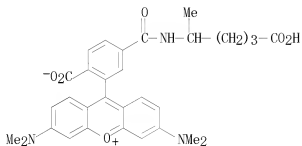
L7 ANSWER 3 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2009:710096 CAPLUS
DN 151:59174
TI Nanofunctional silica particles and manufacturing method thereof
IN Nakamura, Michihiro
PA The University of Tokushima, Japan
S0 PCT Int. Appl., 87pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN. CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|--|----------|-----------------|----------|
| PI | WO 2009072657 | A1 | 20090611 | WO 2008-JP72285 | 20081208 |
| | W: | AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | |
| | RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, | | | |

AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 PRAI JP 2007-316466 A 20071206
 AB The nanofunctional silica particles have excellent functionality and quality, and are mass-produced at low costs. The nanofunctional silica particles to be used clin., such as in imaging or assay, diagnosis, or treatment, or for bioresearch; and comprise a coating layer containing ≥ 1 of silica compds. selected from mercaptopropyl trimethoxysilane (MPS), mercaptopropyl triethoxysilane (MPES), mercaptopropyl methyltrimethoxysilane (MPDMS), trimethoxy[2-(7-oxabicyclo[4.1.0]-hept-3-yl)ethyl]silane (EpoPS), thiocyanatopropyl triethoxysilane (TCPS) and acryloxypropyl trimethoxysilane (ACPS).
 IT 455253-07-3 1160743-02-1
 RL: TEM (Technical or engineered material use); USES (Uses)
 (production of nanofunctional silica particles)
 RN 455253-07-3 CAPLUS
 CN Xanthylum, 9-[2-carboxy-5-[[5-(5-carboxypentyl)amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (CA INDEX NAME)



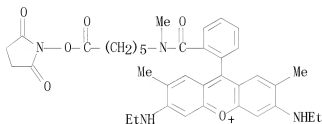
RN 1160743-02-1 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED



RE, CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

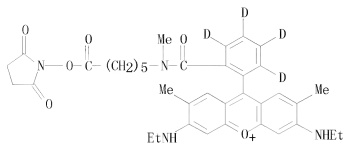
L7 ANSWER 4 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 2008:1254934 CAPLUS
 DN 149:527887
 TI Quantification of Isotope Encoded Proteins in 2-D Gels Using Surface Enhanced Resonance Raman
 AU Knudsen, Giselle M.; Davis, Brandon M.; Deb, Shirshendu K.; Loethen, Yvette; Gudihal, Ravindra; Perera, Pradeep; Ben-Amotz, Dor; Davisson, V. Jo
 CS Department of Medicinal Chemistry and Molecular Pharmacology and the Bindley Bioscience Center at Discovery Park and Department of Chemistry, Purdue University, West Lafayette, IN, 47907, USA

- SO Bioconjugate Chemistry (2008), 19(11), 2212-2220
CODEN: BCCHEJ; ISSN: 1043-1802
- PB American Chemical Society
- DT Journal
- LA English
- AB A strategy for quantification of multiple protein isoforms from a complex sample background is demonstrated, combining isotopomeric rhodamine 6G (R6G) labels and surface-enhanced Raman in polyacrylamide matrix. The procedure involves isotope-encoding by lysine-labeling with (R6G) active ester reagents, isoform separation by 2-DGE, fluorescence quantification using internal standardization to water, and silver nanoparticle deposition followed by surface-enhanced Raman detection. R6G sample encoding and standardization enabled the determination of total protein concentration and the distribution of specific isoforms using the combined detection approach of water-referenced fluorescence spectral imaging and ratiometric quantification. A detection limit of approx. 13.5 picomolar R6G-labeled protein was determined for the surface-enhanced Raman in a gel matrix (15-fold lower than fluorescence). High quantification accuracies for small differences in protein populations at low nanogram abundance were demonstrated for human GMP synthetase (hGMPs) either as purified protein samples in a single-point determination mode (3% relative standard deviation, RSD%) or as HCT116 human cancer cellular lysate in an imaging application (with 16% RSD%). These results represent a prototype for future applications of isotopic surface-enhanced resonance Raman scatter to quantification of protein distributions.
- IT 1040134-67-5 1040134-69-7
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(quantification of isotope encoded proteins in 2-D gels using surface enhanced resonance Raman and isotopomeric rhodamine 6G labels)
- RN 1040134-67-5 CAPLUS
- CN Xanthylum, 9-[2-[[[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]methylamino]carbonyl]phenyl]-3,6-bis(ethylamino)-2,7-dimethyl-, chloride (1:1) (CA INDEX NAME)



● Cl⁻

- RN 1040134-69-7 CAPLUS
- CN Xanthylum, 9-[6-[[[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]methylamino]carbonyl]phenyl]-2,3,4,5-tetra-3,6-bis(ethylamino)-2,7-dimethyl-, chloride (1:1) (CA INDEX NAME)

● Cl⁻

RE.CNT 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2008:885880 CAPLUS

DN 149:200790

TI Preparation of sulfonamide derivatives of xanthene as fluorescent
detection reagents

IN Frank, Wilhelm G.; Wenzel, Matthias S.; Czerney, Peter T.; Desai, Surbhi;
Hermanson, Greg

PA Pierce Biotechnology, Inc., USA

SO Eur. Pat. Appl., 33 pp.

CODEN: EPXXDW

DT Patent

LA English

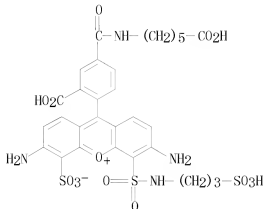
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | EP 1947095 | A1 | 20080723 | EP 2008-250265 | 20080122 |
| | R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, AL, BA, MK, RS | | | | |
| | US 20080177086 | A1 | 20080724 | US 2007-625379 | 20070122 |
| | JP 2008231093 | A | 20081002 | JP 2008-10915 | 20080121 |
| PRAI | US 2007-625379 | A | 20070122 | | |
| OS | CASREACT 149:200790; MARPAT 149:200790 | | | | |
| GI | | | | | |

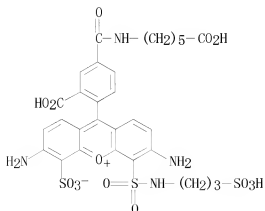
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Disclosed are compds. I [R11 = Q1 or Q2; R1, R2 = -H, -alkyl or - ω -sulfoalkyl; X, Y = -O-, -OH, -SH, etc.; Z = -O- or OH; U = -O-, -OH or NH-L-SO₂Z; L = divalent linear -(CH₂)_n-, crossed, or cyclic alkane group that can be substituted by at least one atom selected from the group consisting of oxygen, substituted nitrogen and/or sulfur; o = 1-15; Kat = Li, Na, K, etc.; An = F, Cl, Br, etc.; m = 1-6 necessary to compensate the neg. or pos. charge from the dye moiety; n = 0-12] were prepared. Thus, a multi-step synthesis of 11·2EtN+H(iso-Pr)₂ (11I), starting from 5-(6)-carboxyrhodamine 110 hydrochloride, was given. It was demonstrated that compds. I are useful as fluorescent dyes in biol. assays. For example, rabbit IgG was detected at a level of 2 ng/well with the 11I-GAR (Goat anti-Rabbit) conjugate.

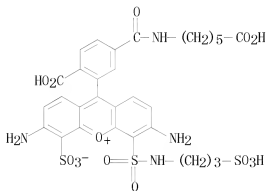
IT 1041432-12-5P
 RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 PRPH (Prophetic); RCT (Reactant); SPN (Synthetic preparation); ANST
 (Analytical study); BIOL (Biological study); PREP (Preparation); RACT
 (Reactant or reagent); USES (Uses)
 (preparation of sulfonamide derivs. of xanthene as fluorescent detection
 reagents)
 RN 1041432-12-5 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED



IT 1041432-01-2P
 RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); BIOL
 (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES
 (Uses)
 (preparation of sulfonamide derivs. of xanthene as fluorescent detection
 reagents)
 RN 1041432-01-2 CAPLUS
 CN Xanthylum, 3,6-diamino-9-[2-carboxy-4-[(5-carboxypentyl)amino]carbonyl]phenyl]-4-sulfo-5-[(3-sulfopropyl)amino]sulfonyl]-, inner salt, sodium salt (1:1) (CA INDEX NAME)



IT 1041432-02-3P 1041432-04-5P 1041432-06-7P
 1041432-07-8P 1041432-08-9P
 RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological
 study); PREP (Preparation); USES (Uses)
 (preparation of sulfonamide derivs. of xanthene as fluorescent detection
 reagents)
 RN 1041432-02-3 CAPLUS
 CN Xanthylum, 3,6-diamino-9-[2-carboxy-5-[[[5-(5-
 carboxypentyl)amino]carbonyl]phenyl]-4-sulfo-5-[[[3-
 sulfopropyl)amino]sulfonyl]-, inner salt, sodium salt (1:1) (CA INDEX
 NAME)



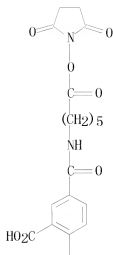
● Na

RN 1041432-04-5 CAPLUS
 CN Xanthylum, 3,6-diamino-9-[2-carboxy-4-[[[6-[(2,5-dioxo-1-
 pyrrolidinyl)oxy]-6-oxohexyl]amino]carbonyl]phenyl]-4-sulfo-5-[[[3-
 sulfopropyl)amino]sulfonyl]-, inner salt, compd. with
 N-ethyl-N-(1-methylethyl)-2-propanamine (1:2) (CA INDEX NAME)

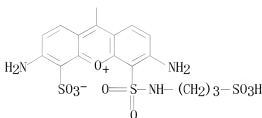
CM 1

CRN 1041432-03-4
 CMF C34 H35 N5 O16 S3

PAGE 1-A



PAGE 2-A



CM 2

CRN 7087-68-5

CMF C8 H19 N

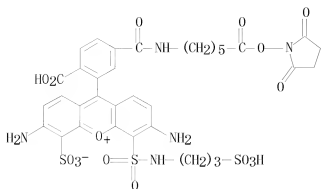


RN 1041432-06-7 CAPLUS
 CN Xanthylum, 3,6-diamino-9-[[2-carboxy-5-[[[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]amino]carbonyl]phenyl]-4-sulfo-5-[(3-sulfopropyl)amino]sulfonyl]-, inner salt, compd. with N-ethyl-N-(1-methylethyl)-2-propanamine (1:2) (CA INDEX NAME)

CM 1

CRN 1041432-05-6

CMF C34 H35 N5 O16 S3



CM 2

CRN 7087-68-5

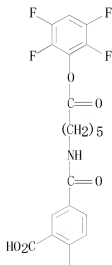
CMF C8 H19 N



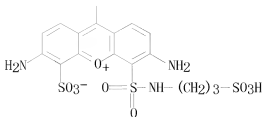
RN 1041432-07-8 CAPLUS

CN Xanthylum, 3,6-diamino-9-[2-carboxy-4-[[[6-oxo-6-(2,3,5,6-tetrafluorophenoxy)hexyl]amino]carbonyl]phenyl]-4-sulfo-5-[[[3-sulfopropyl]amino]sulfonyl]-, inner salt, sodium salt (1:1) (CA INDEX NAME)

PAGE 1-A

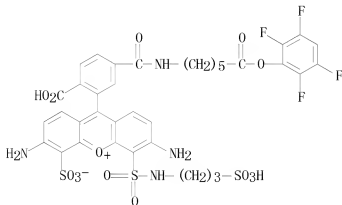


PAGE 2-A



● Na

RN 1041432-08-9 CAPLUS
 CN Xanthylum, 3, 6-diamino-9-[[2-carboxy-5-[[[6-oxo-6-(2, 3, 5, 6-tetrafluorophenoxy)hexyl]amino]carbonyl]phenyl]-4-sulfo-5-[[3-sulfopropyl]amino]sulfonyl]-, inner salt, sodium salt (1:1) (CA INDEX NAME)



● Na

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 6 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 2008:799316 CAPLUS
 DN 149:170484
 TI Detection and Relative Quantification of Proteins by Surface Enhanced Raman Using Isotopic Labels
 AU Deb, Shirshendu K.; Davis, Brandon; Knudsen, Giselle M.; Gudihal, Ravindra; Ben-Amotz, Dor; Davisson, V. Jo
 CS Department of Medicinal Chemistry and Molecular Pharmacology, Bindley Bioscience Center, and Department of Chemistry, Purdue University, West Lafayette, IN, 47907, USA
 SO Journal of the American Chemical Society (2008), 130(30), 9624-9625
 CODEN: JACSAT; ISSN: 0002-7863
 PB American Chemical Society
 DT Journal
 LA English

OS CASREACT 149:170484

AB Accurate quantification of protein content and composition has been achieved using isotope-edited surface enhanced resonance Raman spectroscopy. Synthesis of isotopomeric Rhodamine dye-linked bioconjugation reagents enabled direct labeling of surface lysines on a variety of proteins. When separated in polyacrylamide gels and stained with silver nanoparticles, the spectral signatures reflect the expected statistical distribution of isotopomeric labels on the labeled proteins in the gel matrix format without interference from protein features.

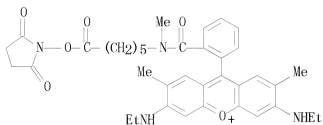
IT 1040134-67-5P 1040134-69-7P

RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)

(detection and relative quantification of proteins by surface enhanced Raman using isotopic labels, SDS-polyacrylamide gel electrophoresis, and silver nanoparticle staining)

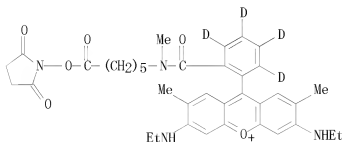
RN 1040134-67-5 CAPLUS

CN Xanthylum, 9-[2-[[[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]methylamino]carbonyl]phenyl]-3,6-bis(ethylamino)-2,7-dimethyl-, chloride (1:1) (CA INDEX NAME)

● Cl⁻

RN 1040134-69-7 CAPLUS

CN Xanthylum, 9-[6-[[[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]methylamino]carbonyl]phenyl]-2,3,4,5-d4]-3,6-bis(ethylamino)-2,7-dimethyl-, chloride (1:1) (CA INDEX NAME)

● Cl⁻

IT 1040134-61-9P 1040134-65-3P

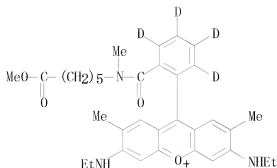
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(detection and relative quantification of proteins by surface enhanced

Raman using isotopic labels, SDS-polyacrylamide gel electrophoresis,
and silver nanoparticle staining)

RN 1040134-61-9 CAPLUS

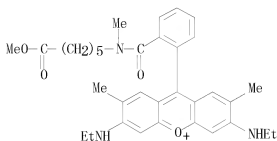
CN Xanthylum, 3,6-bis(ethylamino)-9-[6-[[6-methoxy-6-oxohexyl)methylamino]carbonyl]phenyl]-2,3,4,5-d4]-2,7-dimethyl-, chloride (1:1) (CA INDEX NAME)



● Cl⁻

RN 1040134-65-3 CAPLUS

CN Xanthylum, 3,6-bis(ethylamino)-9-[2-[[6-methoxy-6-oxohexyl)methylamino]carbonyl]phenyl]-2,7-dimethyl-, chloride (1:1) (CA INDEX NAME)



● Cl⁻

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2008:486445 CAPLUS

DN 149:55630

TI Photostable, amino reactive and water-soluble fluorescent labels based on sulfonated rhodamine with a rigidized xanthene fragment

AU Boyarskiy, Vadim P.; Belov, Vladimir N.; Medda, Rebecca; Hein, Birka; Bossi, Mariano; Hell, Stefan W.

CS Department of NanoBiophotonics, Max Planck Institute for Biophysical Chemistry, Goettingen, 37077, Germany

S0 Chemistry—A European Journal (2008), 14(6), 1784-1792
CODEN: CEUJED; ISSN: 0947-6539

PB Wiley-VCH Verlag GmbH & Co. KGaA

DT Journal

LA English

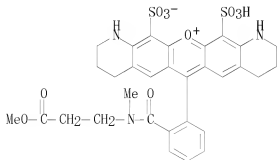
OS CASREACT 149:55630

AB Highly water soluble fluorescent dyes were synthesized and transformed into new amino reactive fluorescent labels for biol. microscopy. To this end, a rhodamine was sulfonated with 30% SO₃ in H₂SO₄ and afforded the water-soluble disulfonic acid. Amidation of the carboxy group in this compound with 2-(methylamino)ethanol in the presence of O-(7-azabenzotriazol-1-yl)-N,N,N',N'-tetramethyluronium hexafluorophosphate led to an alc., which was transformed into an amino reactive mixed carbonate with di(N-succinimidyl)carbonate and Et₃N. Reaction of the carboxy group in the original disulfonic acid with MeNH(CH₂)₂CO₂Me and N,N,N',N'-tetramethyl-O-(N-succinimidyl)-uronium BF₄⁻ yielded the Me ester. After saponification of the aliphatic carboxy group in this Me ester, the compound was converted into an NHS-ester. Heating of tetrahydro-7-quinolinol with trimellitic anhydride in H₃PO₄ gave a 1:1 mixture of rhodamine dicarboxylic acid regioisomers. One of the regioisomers was isolated, sulfonated with 30% SO₃ in H₂SO₄, and the resulting disulfonic acid was used for the synthesis of the mono NHS-ester in which the sterically unhindered carboxy group was selectively activated with N-hydroxysuccinimide. Three of the sulfonated rhodamines are soluble in water (up to 0.1 M) and have excellent photostabilities and large fluorescence quantum yields. Subdiffraction resolution images of tubulin filaments of mammalian cells stained with these dyes illustrate their applicability as labels for stimulated emission depletion microscopy and other fluorescence techniques.

IT 1032434-44-8P 1032434-46-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate; preparation of fluorescent labels based on sulfonated rhodamines with rigidized xanthene fragment)

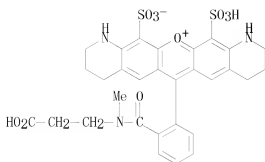
RN 1032434-44-8 CAPLUS

CN Pyrano[3,2-g:5,6-g']diquinolin-13-ium,
 1,2,3,4,8,9,10,11-octahydro-6-[2-[(3-methoxy-3-oxopropyl)methylamino]carbonyl]phenyl]-12,14-disulfo-, inner salt (CA INDEX NAME)

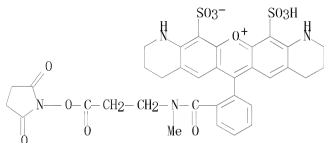


RN 1032434-46-0 CAPLUS

CN Pyrano[3,2-g:5,6-g']diquinolin-13-ium,
 6-[2-[(2-carboxyethyl)methylamino]carbonyl]phenyl]-1,2,3,4,8,9,10,11-octahydro-12,14-disulfo-, inner salt (CA INDEX NAME)



IT 1032434-47-1P
 RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (preparation of fluorescent labels based on sulfonated rhodamines with rigidized xanthene fragment)
 RN 1032434-47-1 CAPLUS
 CN Pyrano[3,2-g:5,6-g']diquinolin-13-ium,
 6-[2-[[[3-[(2,5-dioxo-1-pyrrolidinyl)oxy]-3-oxopropyl]methylamino]carbonyl]phenyl]-1,2,3,4,8,9,10,11-octahydro-12,14-disulfo-, inner salt (CA INDEX NAME)



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
 RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 2008:353231 CAPLUS
 DN 148:379494
 TI Preparation of spirobenzopyran(homo)piperidines and related compounds as
 nootropics.
 IN Dolle, Roland E.; Lebourdonnec, Bertrand
 PA Adolor Corporation, USA
 SO PCT Int. Appl., 251pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------|---|----------|-----------------|----------|
| PI WO 2008033299 | A2 | 20080320 | WO 2007-US19661 | 20070907 |
| WO 2008033299 | A3 | 20081120 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, EW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, | | | |

KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
 MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,
 PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN,
 TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
 GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
 BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
 AU 2007294968 A1 20080320 AU 2007-294968 20070907
 CA 2662115 A1 20080320 CA 2007-2662115 20070907
 US 20080119452 A1 20080522 US 2007-851995 20070907
 EP 2063886 A2 20090603 EP 2007-811730 20070907
 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR,
 AL, BA, HR, MK, RS
 PRAI US 2006-843979P P 20060912
 WO 2007-US19661 W 20070907
 OS MARPAT 148:379494
 GI



AB Title compds. [I; Y2 = bond, (CRcRd)k; Re, Rd, Re, Rf = H, alkyl; W2 = aryl, alkylaryl, heterocycloalkylaryl, heteroaryl, alkylheteroaryl, heteroarylalkyl, alkylheteroarylaryl; R23, R24 = H, alkyl; R25 = H, alkyl, alkenylmethyl, alkynylmethyl, cycloalkyl, alkylcycloalkyl, aralkyl, heteroarylalkyl; k = 1-3; p, s = 0-3; p+s ≤ 4; A2, B2 = H, alkyl; A2B2 = double bond; G = H, alkyl; X2 = CH2, O, S, S02; J2 = atoms to form a 6-10 membered aryl; Q1 = (CHRe)p; Q2 = (CHrf)s], were prepared for treatment of cognitive dysfunction and memory loss. Thus, 442 analogs of I were prepared, two of which showed activity in the object recognition task in rats at 3 mg/kg orally with 71-73% of time spent on novel objects, vs. 63% for vehicle-treated controls.

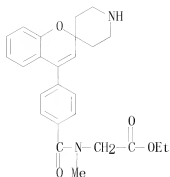
IT 850174-29-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

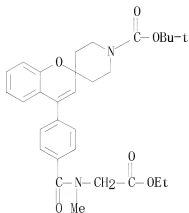
(preparation of spirobenzopyran(homo)piperidines and related compds. as nootropics)

RN 850174-29-7 CAPLUS

CN Glycine, N-methyl-N-(4-spiro[2H-1-benzopyran-2,4'-piperidin]-4-ylbenzoyl)-, ethyl ester (CA INDEX NAME)



IT 1013334-56-9P
 RL: PRPH (Prophetic); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of spirobenzopyran(homo)piperidines and related compds. as nootropics)
 RN 1013334-56-9 CAPLUS
 CN Spiro[2H-1-benzopyran-2,4'-piperidine]-1'-carboxylic acid, 4-[[[(2-ethoxy-2-oxoethyl)methylamino]carbonyl]phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



L7 ANSWER 9 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 2008:149892 CAPLUS
 DN 149:465534
 TI Synthesis and characterization of photoswitchable fluorescent silica nanoparticles
 AU Foelling, Jonas; Polyakova, Svetlana; Belov, Vladimir; van Blaaderen, Alfons; Bossi, Mariano L.; Hell, Stefan W.
 CS Department of NanoBiophotonics, Max Planck Institute for Biophysical Chemistry, Goettingen, 37077, Germany
 SO Small (2008), 4(1), 134-142
 CODEN: SMALBC; ISSN: 1613-6810
 PB Wiley-VCH Verlag GmbH & Co. KGaA
 DT Journal
 LA English
 OS CASREACT 149:465534
 AB We have designed and synthesized a new functional (amino reactive) highly efficient fluorescent mol. switch (FMS) with a photochromic diarylethene and a rhodamine fluorescent dye. The reactive group in this

FMS-N-hydroxysuccinimide ester- allows selective labeling of amino containing mols. or other materials. In ethanolic solns., the compound displays a large fluorescent quantum yield of 52% and a large fluorescence modulation ratio (94%) between two states that may be interconverted with red and near-UV light. Silica nanoparticles incorporating the new FMS were prepared and characterized, and their spectroscopic and switching properties were also studied. The dye retained its properties after the incorporation into the silica, thereby allowing light-induced reversible high modulation of the fluorescence signal of a single particle for up to 60 cycles, before undergoing irreversible photobleaching. Some applications of these particles in fluorescence microscopy are also demonstrated. In particular, subdiffraction images of nanoparticles were obtained, in the focal plane of a confocal microscope.

IT 1070867-76-3P

RL: ARG (Analytical reagent use); NUU (Other use, unclassified); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)

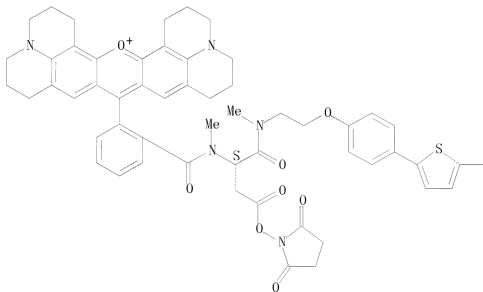
(synthesis and characterization of photoswitchable fluorescent silica nanoparticles)

RN 1070867-76-3 CAPLUS

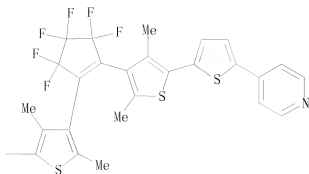
CN 1H, 5H, 11H, 15H-Xantheno[2, 3, 4-ij:5, 6, 7-i' j']diquinolizin-18-ium, 9-[2-[[[(1S)-1-[[[2-[4-[4'-[2-[3, 5-dimethyl-5'-(4-pyridinyl)[2, 2'-bithiophen]-4-yl]-3, 3, 4, 4, 5, 5-hexafluoro-1-cyclopenten-1-yl]-3', 5'-dimethyl[2, 2'-bithiophen]-5-yl]phenoxy]ethyl]methylamino]carbonyl]-3-[(2, 5-dioxo-1-pyrrolidinyl)oxy]-3-oxopropyl]methylamino]carbonyl]phenyl]-2, 3, 6, 7, 12, 13, 16, 17-octahydro- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



IT 1070867-74-1P

RL: NUU (Other use, unclassified); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

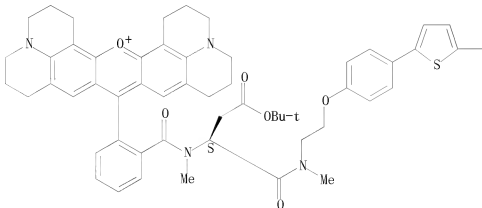
(synthesis and characterization of photoswitchable fluorescent silica nanoparticles)

RN 1070867-74-1 CAPLUS

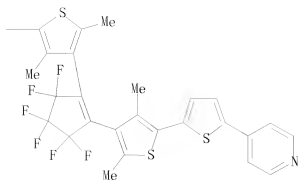
CN 1H, 5H, 11H, 15H-Xantheno[2, 3, 4-ij:5, 6, 7-i' j']diquinolizin-18-ium, 9-[2-[[[(1S)-3-(1,1-dimethylethoxy)-1-[[[2-[4-[4'-[2-[3,5-dimethyl-5'-(4-pyridinyl)[2,2'-bithiophen]-4-yl]-3,3,4,4,5,5-hexafluoro-1-cyclopenten-1-yl]-3',5'-dimethyl[2,2'-bithiophen]-5-yl]phenoxy]ethyl]methylamino]carbonyl]-3-oxopropyl]methylamino]carbonyl]phenyl]-2,3,6,7,12,13,16,17-octahydro-, hydroxide (1:1) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

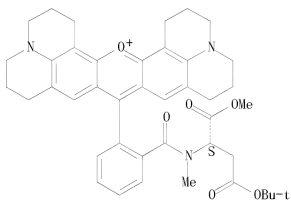
● OH⁻

PAGE 1-B



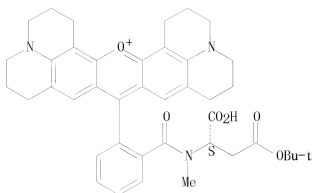
IT 1070867-72-9P 1070867-73-0P 1070867-75-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (synthesis and characterization of photoswitchable fluorescent silica
 nanoparticles)
 RN 1070867-72-9 CAPLUS
 CN 1H, 5H, 11H, 15H-Xantheno[2, 3, 4-ij:5, 6, 7-i' j']diquinolizin-18-ium,
 9-[2-[[[(1S)-3-(1, 1-dimethylethoxy)-1-(methoxycarbonyl)-3-
 oxopropyl]methylamino]carbonyl]phenyl]-2, 3, 6, 7, 12, 13, 16, 17-octahydro-,
 hydroxide (1:1) (CA INDEX NAME)

Absolute stereochemistry.

● OH⁻

RN 1070867-73-0 CAPLUS
 CN 1H, 5H, 11H, 15H-Xantheno[2, 3, 4-ij:5, 6, 7-i' j']diquinolizin-18-ium,
 9-[2-[[[(1S)-1-carboxy-3-(1, 1-dimethylethoxy)-3-
 oxopropyl]methylamino]carbonyl]phenyl]-2, 3, 6, 7, 12, 13, 16, 17-octahydro-,
 hydroxide (1:1) (CA INDEX NAME)

Absolute stereochemistry.

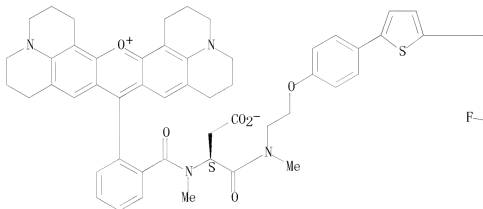


RN 1070867-75-2 CAPLUS

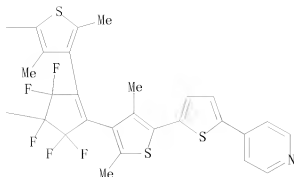
CN 1H, 5H, 11H, 15H-Xantheno[2, 3, 4-ij:5, 6, 7-i' j']diquinolizin-18-ium,
9-[2-[[[(1S)-1-(carboxymethyl)-2-[[2-[4-[4'-[2-[3, 5-dimethyl-5'-(4-pyridinyl)]2, 2'-bithiophen]-4-yl]-3, 3, 4, 4, 5, 5-hexafluoro-1-cyclopenten-1-yl]-3', 5'-dimethyl[2, 2'-bithiophen]-5-yl]phenoxy]ethyl]methylamino]-2-oxoethyl]methylamino]carbonyl]phenyl]-2, 3, 6, 7, 12, 13, 16, 17-octahydro-,
inner salt (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
 RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 10 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN
 AN 2007:1364408 CAPLUS
 DN 148:35065
 TI Rhodamine fluorescent dye compounds and the use of their labeled
 conjugates
 IN Romanov, Nikolai Nikolaevich; Barnes, Colin Lloyd
 PA Solexa Limited, UK
 S0 PCT Int. Appl., 102 pp.
 CODEN: P1XXD2
 DT Patent
 LA English
 FAX.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2007135368 | A2 | 20071129 | WO 2007-GB1770 | 20070516 |
| WO 2007135368 | A3 | 20080306 | | |
| W: | | | | |
| AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, | | | | |
| CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, | | | | |
| GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, | | | | |
| KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, | | | | |
| MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, | | | | |
| RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, | | | | |
| TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| RW: | | | | |
| AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, | | | | |
| IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, | | | | |
| BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, | | | | |
| GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, | | | | |
| BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | | |
| EP 2021415 | A2 | 20090211 | EP 2007-732794 | 20070516 |
| R: | | | | |
| AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, | | | | |
| IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, | | | | |
| AL, BA, HR, MK, RS | | | | |
| PRAI US 2006-801270P | P | 20060518 | | |
| WO 2007-GB1770 | W | 20070516 | | |
| OS MARPAT 148:35065 | | | | |
| AB | | | | |

The invention relates to rhodamine dyes particularly suitable for methods of fluorescence detection and sequencing synthesis. The dyes and labeled conjugates are useful as mol. probes in a variety of applications, such as in assays involving staining of cells, protein binding, and anal. of nucleic acids, such as hybridization assays and nucleic acid sequencing.

Thus, a rhodamine dye bearing N-propylsulfonic acid ammonium salt was prepared and tested.

IT 958868-16-1P

RL: IMF (Industrial manufacture); PREP (Preparation)
(manufacture of rhodamine fluorescent dye compds. and use in biomol. staining or labeling)

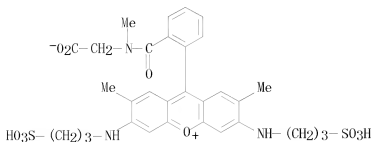
RN 958868-16-1 CAPLUS

CN Xanthylum, 9-[2-[[[(carboxymethyl)methylamino]carbonyl]phenyl]-2,7-dimethyl-3,6-bis[(3-sulfopropyl)amino]-, inner salt, compd. with N,N-diethylethanamine (1:1) (CA INDEX NAME)

CM 1

CRN 958868-15-0

CMF C31 H35 N3 O10 S2



CM 2

CRN 121-44-8

CMF C6 H15 N

Et

Et-N-Et

IT 958868-14-9P 958868-18-3P 958868-24-1P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)
(manufacture of rhodamine fluorescent dye compds. and use in biomol. staining or labeling)

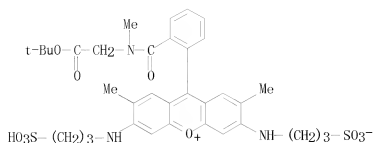
RN 958868-14-9 CAPLUS

CN Xanthylum, 9-[2-[[[2-(1,1-dimethylethoxy)-2-oxoethyl]methylamino]carbonyl]phenyl]-2,7-dimethyl-3,6-bis[(3-sulfopropyl)amino]-, inner salt, compd. with N,N-diethylethanamine (1:1) (CA INDEX NAME)

CM 1

CRN 958868-13-8

CMF C35 H43 N3 O10 S2



CM 2

CRN 121-44-8

CMF C6 H15 N

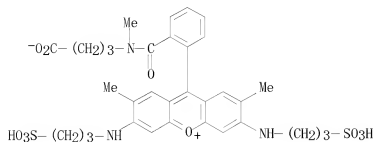


RN 958868-18-3 CAPLUS
 CN Xanthylum, 9-[2-[[[(3-carboxypropyl)methylamino]carbonyl]phenyl]-2,7-dimethyl-3,6-bis[(3-sulfopropyl)amino]-, inner salt, compd. with N,N-diethylethanamine (1:1) (CA INDEX NAME)

CM 1

CRN 958868-17-2

CMF C33 H39 N3 O10 S2



CM 2

CRN 121-44-8

CMF C6 H15 N



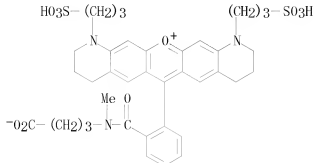
RN 958868-24-1 CAPLUS

CN Pyrano[3,2-g:5,6-g']diquinolin-13-ium,
6-[2-[[[3-carboxypropyl)methylamino]carbonyl]phenyl]-1,2,3,4,8,9,10,11-
octahydro-1,11-bis(3-sulfopropyl)-, inner salt, compd. with
N,N-diethylethanamine (1:1) (CA INDEX NAME)

CM 1

CRN 958868-23-0

CMF C37 H43 N3 O10 S2



CM 2

CRN 121-44-8

CMF C6 H15 N



L7 ANSWER 11 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2007:1115969 CAPLUS

DN 147:536979

TI Yoctomole analysis of ganglioside metabolism in PC12 cellular homogenates

AU Whitmore, Colin D.; Olsson, Ulf; Larsson, E. Andreas; Hinds Gaul, Ole;

Palcic, Monica M.; Dovichi, Norman J.

CS Department of Chemistry, University of Washington, Seattle, WA, USA

S0 Electrophoresis (2007), 28(17), 3100-3104

CODEN: ELCTDN; ISSN: 0173-0835

PB Wiley-VCH Verlag GmbH & Co. KGaA

DT Journal

LA English

AB The authors report an ultrasensitive method for the anal. of glycosphingolipid catabolism. The substrate GM1 and the set of seven metabolites into which it can be degraded (GA1, GM2, GA2, GM3, LacCer, GlcCer, and Cer) were labeled with the highly fluorescent dye tetramethylrhodamine. CE [capillary electrophoresis] with LIF detection was used to assay these compds. with 150 ± 80 yoctomole mass ($1 \text{ ymol} = 10^{-24} \text{ mol} = 0.6 \text{ copies}$) detection limits and $5 \pm 3 \text{ pM}$ concentration detection limits. An alignment algorithm based on migration of two components was employed to correct for drift in the separation. The within-day and between-day precision in peak height was 20%, in peak width 15%, and in adjusted migration time 0.03%. After normalization to total sample injected, the RSD in peak height reduced to 2-6%, which approaches the limit set by mol.

shot noise in the number of mols. taken for anal. PC12 cells were incubated with the labeled GMI. Fluorescent microscopy demonstrated uptake by the cells. CE was used to sep. a cellular homogenate prepared from these cells. A set of peaks was observed, which were tentatively identified based on comigration with the stds. Roughly 120 pL of homogenate was injected, which contained a total of 150 zmol of labeled substrate and products. Metabolite that preserves the fluorescent label can be detected at the yoctomole level, which should allow characterization of this metabolic pathway in single cells.

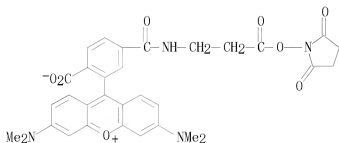
IT 933058-16-3

RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(yoctomole anal. of ganglioside metabolism in PC12 cellular homogenates by capillary electrophoresis with laser-induced fluorescence detection)

RN 933058-16-3 CAPLUS

CN Xanthylum, 9-[2-carboxy-5-[[[3-[(2,5-dioxo-1-pyrrolidinyl)oxy]-3-oxopropyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (CA INDEX NAME)



OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 12 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2007:1100349 CAPLUS

DN 147:527845

TI Simple branched arginine-based structures can enhance the cellular uptake of peptide cargos

AU Chua, Brendon Y.; Zeng, Weiguang; Jackson, David C.

CS Department of Microbiology Immunology, The University of Melbourne, Parkville, Victoria, 3010, Australia

S0 International Journal of Peptide Research and Therapeutics (2007), 13(3), 431-437

CODEN: IJPRFC; ISSN: 1573-3149

PB Springer

DT Journal

LA English

AB In an attempt to design delivery vehicles to enable epitope-based vaccine uptake, we investigated the properties of a variety of synthetic, branched cationic structures. We found that branched compds. based on arginine or lysine were able to facilitate internalization of peptide cargo into cells to different degrees. Branched constructs containing only two arginine residues (R2) were not only able to bind to cells more efficiently than constructs with two lysine residues (K2) but were also internalized within vesicle like compartments in the cell. The extent of binding and uptake was enhanced when addnl. arginine residues were incorporated to form a tetra arginine construct (R4). An investigation into the kinetics and dose dependence of cellular uptake of these arginine-based constructs

demonstrated that binding and internalization is a rapid and efficient event. We also found uptake of the peptide epitope TYQKTRALV was enhanced when it was coupled to R4. This approach may prove useful for introducing peptide epitopes into antigen presenting cells as self-adjuvanting structures and also for delivery of other peptides into different specialized cells.

| | | | |
|----|-------------|-------------|-------------|
| IT | 955960-68-6 | 955960-69-7 | 955960-71-1 |
| | 955960-73-3 | | |

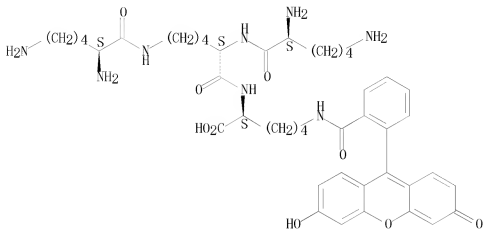
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(simple branched arginine-based structures can enhance the cellular uptake of peptide cargos)

RN 955960-68-6 CAPLUS

L-lysine, N2, N6-di-L-lysyl-L-lysyl-N6-[2-(6-hydroxy-3-oxo-3H-xanthen-9-yl)benzoyl]- (CA INDEX NAME)

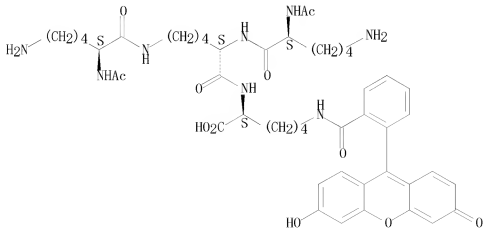
Absolute stereochemistry.



RN 955960-69-7 CAPLUS

L-Lysine, N2,N6-bis(N2-acetyl-L-lysyl)-L-lysyl-N6-[2-(6-hydroxy-3-oxo-3H-xanthen-9-yl)benzoyl]- (CA INDEX NAME)

Absolute stereochemistry.

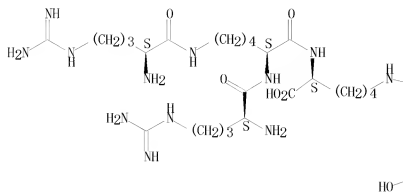


RN 955960-71-1 CAPLUS

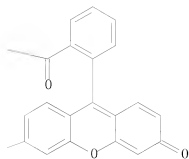
L-Lysine, N2, N6-di-L-arginyl-L-lysyl-N6-[2-(6-hydroxy-3-oxo-3H-xanthen-9-yl)benzoyl]- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

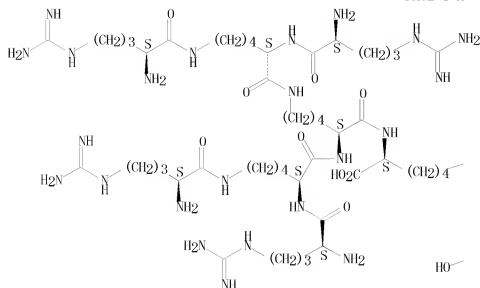


RN 955960-73-3 CAPLUS

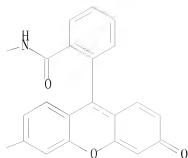
CN L-Lysine, N2, N6-bis (N2, N6-di-L-arginyl-L-lysyl)-L-lysyl-N6-[2-(6-hydroxy-3-oxo-3H-xanthene-9-yl)benzoyl]- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



RE, CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 13 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2007:404576 CAPLUS
DN 147:26152
TI Turnip Yellow Mosaic Virus as a Chemoaddressable Bionanoparticle
AU Barnhill, Hannah N.; Reuther, Rachel; Ferguson, P. Lee; Dreher, Theo;
Wang, Qian
CS Department of Chemistry and Biochemistry and Nanocenter, University of
South Carolina, Columbia, SC, 29208, USA
S0 Bioconjugate Chemistry (2007), 18(3), 852-859

CODEN: BCCHES; ISSN: 1043-1802

PB American Chemical Society

DT Journal

LA English

AB Viruses and virus-like particles (VLPs) have been demonstrated to be robust scaffolds for the construction of nanomaterials. To develop new nanopores for time-resolved fluorimmunoassays as well as to investigate the two-dimensional self-assembly of viruses and VLPs, the icosahedral turnip yellow mosaic virus (TYMV) was investigated as a potential building block in the authors' study. TYMV is an icosahedral plant virus with an average diameter of 28 nm that can be isolated inexpensively in gram quantities from turnips or Chinese cabbage. There are 180 coat protein subunits per TYMV capsid. The conventional N-hydroxysuccinimide-mediated amidation reaction was employed for the chemical modification of the viral capsid. Tryptic digestion with sequential MALDI-TOF MS anal. identified that the amino groups of K32 of the flexible N-terminus made the major contribution for the reactivity of TYMV toward N-hydroxysuccinimide ester (NHS) reagents. The reactivity was also monitored with UV-vis absorbance and fluorescence, which revealed that approx. 60 lysines per particle could be addressed. The authors hypothesized that the flexible A chain contains the reactive lysine because the crystal structure of TYMV has shown that chain A is much more flexible compared to B and C, especially at the N-terminal region where the Lys-32 located. In addition, about 90 to 120 carboxyl groups, located in the most exposed sequence, could be modified with amines catalyzed with 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide) hydrochloride (EDC) and sulfo-NHS. TYMV was stable to a wide range of reaction conditions and maintained its integrity after the chemical conjugations. Therefore, it can potentially be employed as a reactive scaffold for the display of a variety of materials for applications in many areas of nanoscience.

IT 939436-23-4

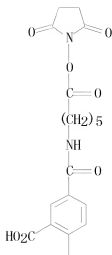
RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(turnip yellow mosaic virus as chemaddressable bionanoparticle by coupling via lysine residues and carboxyl groups)

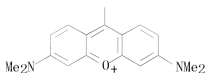
RN 939436-23-4 CAPLUS

CN Xanthylum, 9-[2-carboxy-4-[[[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)- (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

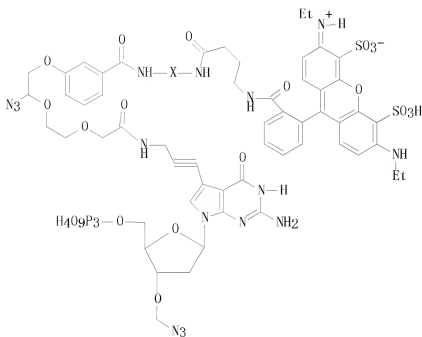


OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)
 RE.CNT 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 14 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 2007:198977 CAPLUS
 DN 146:229558
 TI Preparation and quenching effect of fluorescent labeled dye-containing
 modified nucleosides and nucleotides and uses thereof
 IN Liu, Xiaohai; Milton, John
 PA Solexa Limited, UK
 SO PCT Int. Appl., 51pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|----------|
| PI | WO 2007020457 | A2 | 20070222 | WO 2006-GB3095 | 20060818 |
| | WO 2007020457 | A3 | 20071025 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, | | | | |

RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ,
 UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
 US 20070042407 A1 20070222 US 2006-494279 20060727
 EP 1926829 A2 20080604 EP 2006-779167 20060818
 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
 PRAI GB 2005-17097 A 20050819
 WO 2006-GB3095 W 20060818
 OS CASREACT 146:229558
 GI



I

AB Modified guanine-containing nucleosides and nucleotides, in particular fluorescent labeled guanine-containing nucleosides and nucleotides, which exhibit reduced quenching effects, and hence enhanced brightness of the fluorophore are described. Thus, nucleotide I [X = -CH₂CH₂NHCOCH₂CH₂(OCH₂CH₂)₁₁OCH₂CH₂-] was prepared and tested for incorporation into a polynucleotide by phosphodiester linkage of each resp. nucleotide to the 3' end of a DNA strand, the precise sequence of which is not of relevance. The fluorescent intensity of the dye in each of the modified nucleotides was then measured, both before and after treatment with tris(2-carboxyethyl)phosphine.

IT 924660-19-5

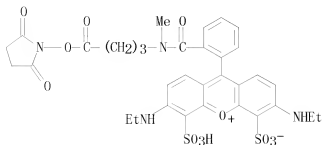
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation and quenching effect of fluorescent labeled dye-containing modified nucleosides and nucleotides and uses thereof)

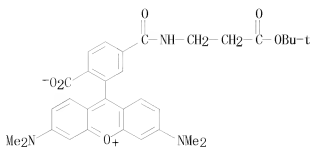
RN 924660-19-5 CAPLUS

CN Xanthylum, 9-[2-[[[4-[(2,5-dioxo-1-pyrrolidinyl)oxy]-4-

oxobutyl]methylamino]carbonyl]phenyl]-3,6-bis(ethylamino)-4,5-disulfo-,
inner salt (CA INDEX NAME)

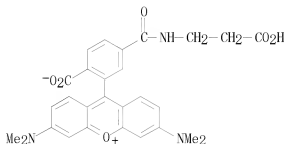


- L7 ANSWER 15 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 2007:131133 CAPLUS
 DN 146:397565
 TI Synthesis of reference standards to enable single cell metabolomic studies
 of tetramethylrhodamine-labeled ganglioside GM1
 AU Larsson, E. Andreas; Olsson, Ulf; Whitmore, Colin D.; Martins, Rita;
 Tettamanti, Guido; Schnaar, Ronald L.; Dovichi, Norman J.; Palcic, Monica
 M.; Hindsgaul, Ole
 CS Carlsberg Laboratory, Valby-Copenhagen, DK-2500, Den.
 SO Carbohydrate Research (2007), 342(3-4), 482-489
 CODEN: CRBRAT; ISSN: 0008-6215
 PB Elsevier B.V.
 DT Journal
 LA English
 OS CASREACT 146:397565
 AB Ganglioside GM1 and its seven potential catabolic products: asialo-GM1,
 GM2, asialo-GM2, GM3, Lac-Cer, Glc-Cer and Cer, were labeled with
 tetramethylrhodamine (TMR) to permit ultra-sensitive anal. using
 laser-induced fluorescence (LIF) detection. The preparation involved acylation
 of the homogeneous C18 lyso-forms of GM1, Lac-Cer, Glc-Cer and Cer with
 the N-hydroxysuccinimide ester of a β -alanine-tethered 6-TMR derivative,
 followed by conversion of these labeled products using galactosidase,
 sialidase, and sialyltransferase enzymes. The TMR-glycolipid analogs
 produced are detectable on TLC down to the 1 ng level by the naked eye.
 All eight compds. could be separated within 4 min in capillary electrophoresis
 where they could be detected at the zeptomole (.apprx.1000 mol.) level
 using LIF.
 IT 933058-14-1P 933058-15-2P 933058-16-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (synthesis of reference stds. to enable single cell metabolomic studies of
 tetramethylrhodamine-labeled ganglioside GM1)
 RN 933058-14-1 CAPLUS
 CN Xanthilium, 9-[2-carboxy-5-[[[3-(1,1-dimethylethoxy)-3-
 oxopropyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (CA
 INDEX NAME)



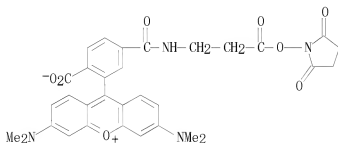
RN 933058-15-2 CAPLUS

CN Xanthylum, 9-[2-carboxy-5-[(2-carboxyethyl)amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (CA INDEX NAME)



RN 933058-16-3 CAPLUS

CN Xanthylum, 9-[2-carboxy-5-[[3-[(2,5-dioxo-1-pyrrolidinyl)oxy]-3-oxopropyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (CA INDEX NAME)



OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 16 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN

AN 2007:117852 CAPLUS

DN 146:212209

TI Hair dye composition for dyeing of keratin fibers comprising an
amidoxanthene direct dye

IN Lagrange, Alain

PA L'Oréal, Fr.

SO Fr. Demande, 74pp.

CODEN: FRXXBL

DT Patent
LA French
FAN, CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---------------|------|----------|-----------------|----------|
| PI | FR 2889060 | A1 | 20070202 | FR 2005-52408 | 20050801 |
| | FR 2889060 | B1 | 20090515 | | |
| PRAI | FR 2005-52408 | | 20050801 | | |

OS MARPAT 146:212209

AB A hair dye composition for dyeing of keratinous fibers, in particular of human keratinous fibers and, more particularly hair, contains an amidoxanthene direct dye. A hair dye composition contained [6-[bis-(2-hydroxy-ethyl)-amino]-9-(2--dipropylcarbamoyl-phenyl)-xanthen-3-ylidene]-bis-(2-hydroxy-ethyl)- ammonium 0.125, alkyl polyglucoside 3, PEG-8 6, benzyl alc. 4, hydroxyethyl cellulose 0.72, buffer pH = 9.50, and water q. s. 100 g. The composition gives a strong red color to the hair.

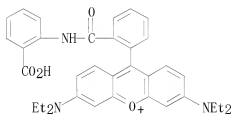
| | | | |
|----|-------------|-------------|-------------|
| IT | 173423-07-9 | 173423-08-0 | 173423-09-1 |
| | 173423-11-5 | 173423-12-6 | 173423-13-7 |
| | 173423-14-8 | 173423-15-9 | 173423-16-0 |
| | 173423-17-1 | 173423-18-2 | 173423-19-3 |
| | 173423-20-6 | 173423-21-7 | 173423-22-8 |
| | 173423-23-9 | 173423-24-0 | 173423-25-1 |
| | 173423-26-2 | 173423-27-3 | 173423-28-4 |
| | 173423-29-5 | 173423-30-8 | 173423-31-9 |
| | 173423-32-0 | 173423-33-1 | 173423-34-2 |
| | 173423-35-3 | 173423-36-4 | 173423-37-5 |
| | 174423-22-4 | 358732-24-8 | 358732-25-9 |
| | 358732-26-0 | 358732-27-1 | 358732-28-2 |
| | 358732-29-3 | 358732-30-6 | |

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(hair dye composition for dyeing keratin fibers comprising amidoxanthene direct dye)

RN 173423-07-9 CAPLUS

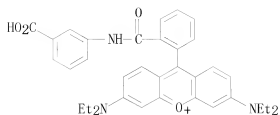
CN Xanthylum, 9-[2-[[(2-carboxyphenyl)amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)



● Cl⁻

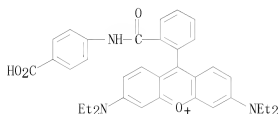
RN 173423-08-0 CAPLUS

CN Xanthylum, 9-[2-[[(3-carboxyphenyl)amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)



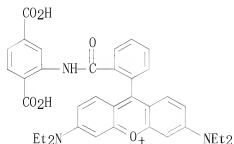
RN 173423-09-1 CAPLUS

CN Xanthylum, 9-[2-[[4-(4-carboxyphenyl)amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)



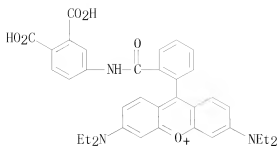
RN 173423-11-5 CAPLUS

CN Xanthylum, 9-[2-[[2,5-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)



RN 173423-12-6 CAPLUS

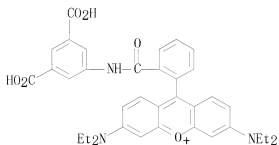
CN Xanthylum, 9-[2-[[3,4-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)



● Cl⁻

RN 173423-13-7 CAPLUS

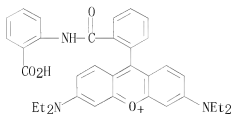
CN Xanthylum, 9-[2-[(3,5-dicarboxyphenyl)amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)



● Cl⁻

RN 173423-14-8 CAPLUS

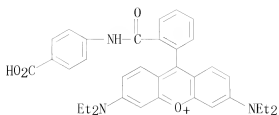
CN Xanthylum, 9-[2-[(2-carboxyphenyl)amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, bromide (1:1) (CA INDEX NAME)



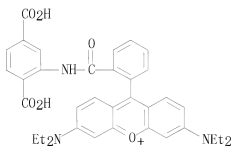
● Br⁻

RN 173423-15-9 CAPLUS

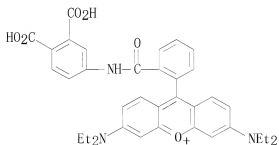
CN Xanthylum, 9-[2-[(4-carboxyphenyl)amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, bromide (1:1) (CA INDEX NAME)



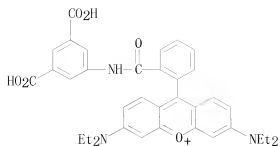
RN 173423-16-0 CAPLUS
 CN Xanthylum, 9-[2-[[[2,5-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, bromide (1:1) (CA INDEX NAME)



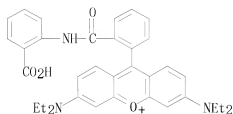
RN 173423-17-1 CAPLUS
 CN Xanthylum, 9-[2-[[[3,4-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, bromide (1:1) (CA INDEX NAME)



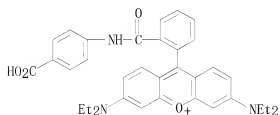
RN 173423-18-2 CAPLUS
 CN Xanthylum, 9-[2-[[[3,5-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, bromide (1:1) (CA INDEX NAME)



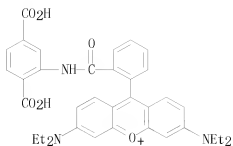
RN 173423-19-3 CAPLUS
 CN Xanthylum, 9-[2-[[2-carboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, iodide (1:1) (CA INDEX NAME)



RN 173423-20-6 CAPLUS
 CN Xanthylum, 9-[2-[[4-carboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, iodide (1:1) (CA INDEX NAME)

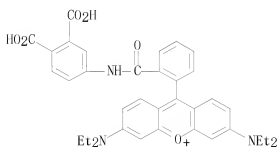


RN 173423-21-7 CAPLUS
 CN Xanthylum, 9-[2-[[2,5-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, iodide (1:1) (CA INDEX NAME)



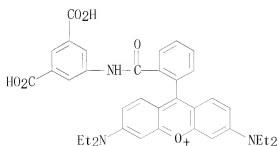
RN 173423-22-8 CAPLUS

CN Xanthylum, 9-[2-[(3,4-dicarboxyphenyl)amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, iodide (1:1) (CA INDEX NAME)



RN 173423-23-9 CAPLUS

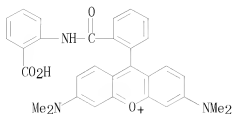
CN Xanthylum, 9-[2-[(3,5-dicarboxyphenyl)amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, iodide (1:1) (CA INDEX NAME)



RN 173423-24-0 CAPLUS

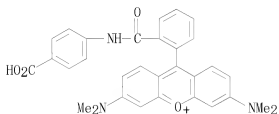
CN Xanthylum, 9-[2-[(2-carboxyphenyl)amino]carbonyl]phenyl]-3,6-

bis(dimethylamino)-, chloride (1:1) (CA INDEX NAME)



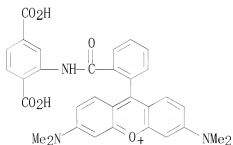
RN 173423-25-1 CAPLUS

CN Xanthylum, 9-[2-[[4-carboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, chloride (1:1) (CA INDEX NAME)



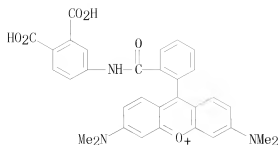
RN 173423-26-2 CAPLUS

CN Xanthylum, 9-[2-[[2,5-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, chloride (1:1) (CA INDEX NAME)



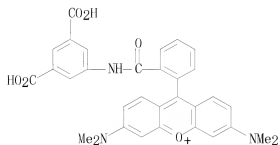
RN 173423-27-3 CAPLUS

CN Xanthylum, 9-[2-[[3,4-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, chloride (1:1) (CA INDEX NAME)



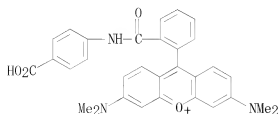
RN 173423-28-4 CAPLUS

CN Xanthylum, 9-[2-[[3,5-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, chloride (1:1) (CA INDEX NAME)



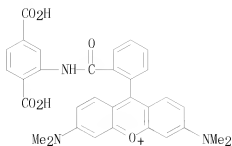
RN 173423-29-5 CAPLUS

CN Xanthylum, 9-[2-[[4-carboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, bromide (1:1) (CA INDEX NAME)



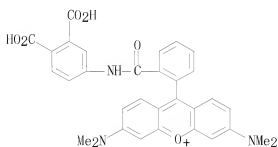
RN 173423-30-8 CAPLUS

CN Xanthylum, 9-[2-[[2,5-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, bromide (1:1) (CA INDEX NAME)



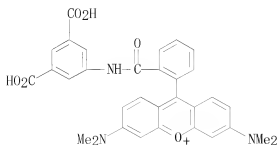
RN 173423-31-9 CAPLUS

CN Xanthylum, 9-[2-[[3,4-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, bromide (1:1) (CA INDEX NAME)



RN 173423-32-0 CAPLUS

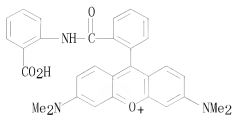
CN Xanthylum, 9-[2-[[3,5-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, bromide (1:1) (CA INDEX NAME)



RN 173423-33-1 CAPLUS

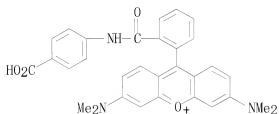
CN Xanthylum, 9-[2-[[2-carboxyphenyl]amino]carbonyl]phenyl]-3,6-

bis(dimethylamino)-, iodide (1:1) (CA INDEX NAME)



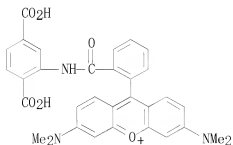
RN 173423-34-2 CAPLUS

CN Xanthylum, 9-[2-[[4-carboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, iodide (1:1) (CA INDEX NAME)



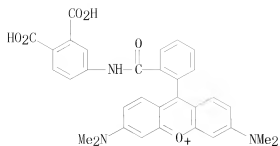
RN 173423-35-3 CAPLUS

CN Xanthylum, 9-[2-[[2,5-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, iodide (1:1) (CA INDEX NAME)

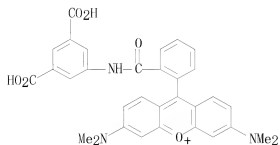


RN 173423-36-4 CAPLUS

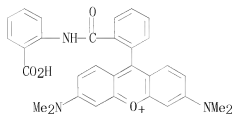
CN Xanthylum, 9-[2-[[3,4-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, iodide (1:1) (CA INDEX NAME)



RN 173423-37-5 CAPLUS
 CN Xanthylum, 9-[2-[[3,5-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, iodide (1:1) (CA INDEX NAME)

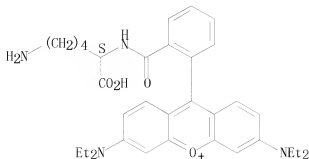


RN 174423-22-4 CAPLUS
 CN Xanthylum, 9-[2-[[2-carboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, bromide (1:1) (CA INDEX NAME)



RN 358732-24-8 CAPLUS
 CN Xanthylum, 9-[2-[[[(1S)-5-amino-1-carboxypentyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

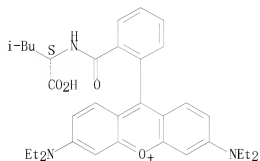


● Cl⁻

RN 358732-25-9 CAPLUS

CN Xanthylum, 9-[2-[[[(1S)-1-carboxy-3-methylbutyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

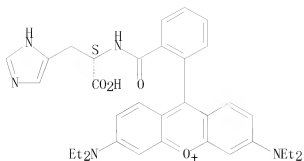


● Cl⁻

RN 358732-26-0 CAPLUS

CN Xanthylum, 9-[2-[[[(1S)-1-carboxy-2-(1H-imidazol-5-yl)ethyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)

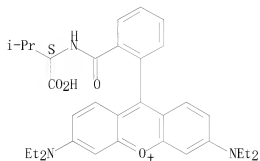
Absolute stereochemistry.



● Cl⁻

RN 358732-27-1 CAPLUS
 CN Xanthylum, 9-[2-[[[(1S)-1-carboxy-2-methylpropyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)

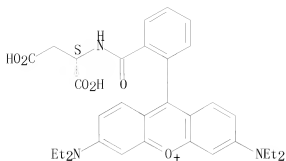
Absolute stereochemistry.



● Cl⁻

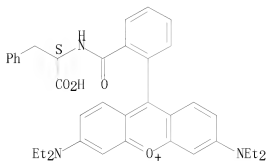
RN 358732-28-2 CAPLUS
 CN Xanthylum, 9-[2-[[[(1S)-1,2-dicarboxyethyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



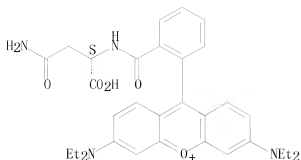
RN 358732-29-3 CAPLUS
 CN Xanthylum, 9-[2-[[[(1S)-1-carboxy-2-phenylethyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



RN 358732-30-6 CAPLUS
 CN Xanthylum, 9-[2-[[[(1S)-3-amino-1-carboxy-3-oxopropyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



● Cl⁻

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 17 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN

AN 2006:1338591 CAPLUS

DN 146:100130

TI Synthesis of combinatorial libraries containing encoding oligonucleotide tags

IN Morgan, Barry; Hale, Stephen; Arico-Muendel, Christopher C.; Clark, Matthew; Wagner, Richard; Kavarana, Malcolm J.; Creaser, Steffen Phillip; Franklin, George J.; Centrella, Paolo A.; Israel, David I.; Geftter, Malcolm L.; Benjamin, Dennis; Hansen, Nils Jakob Vest; Acharya, Raksha A.

PA Praecis Pharmaceuticals, Inc., USA

S0 PCT Int. Appl., 286 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|--|----------|-----------------|----------|
| PI | WO 2006135786 | A2 | 20061221 | WO 2006-US22555 | 20060609 |
| | WO 2006135786 | A3 | 20070621 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| | RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | |
| | AU 2006257915 | A1 | 20061221 | AU 2006-257915 | 20060609 |
| | CA 2611512 | A1 | 20061221 | CA 2006-2611512 | 20060609 |
| | EP 1910538 | A2 | 20080416 | EP 2006-784718 | 20060609 |
| | R: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS | | | |
| | JP 2008543289 | T | 20081204 | JP 2008-515983 | 20060609 |
| | MX 2007015543 | A | 20080605 | MX 2007-15543 | 20071207 |
| | DK 2008000005 | A | 20080304 | DK 2008-5 | 20080103 |

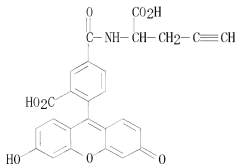
| | | | | | |
|------|-------------------|---|----------|------------------|----------|
| | KR 2008036577 | A | 20080428 | KR 2008-700511 | 20080108 |
| | IN 2008DN00212 | A | 20080711 | IN 2008-DN212 | 20080108 |
| | CN 101233235 | A | 20080730 | CN 2006-80027615 | 20080128 |
| PRAI | US 2005-689466P | P | 20050609 | | |
| | US 2005-731041P | P | 20051028 | | |
| | WO 2006-US22555 | W | 20060609 | | |
| OS | MARPAT 146:100130 | | | | |

AB The present invention provides methods which enable facile synthesis of oligonucleotide-encoded combinatorial libraries, and permit an efficient, high-fidelity means of adding such an oligonucleotide tag to each member of a vast collection of mols. The method utilizes a "split and pool" strategy in which an initiator, comprising a first building block linked to an encoding oligonucleotide, is divided ("split") into multiple fractions. In each fraction, the initiator is reacted with a second, unique building block and a second, unique oligonucleotide which identifies the second building block. These reactions can be simultaneous or sequential and, if sequential, either reaction can precede the other. The dimeric mols. produced in each of the fractions are combined ("pooled") and then divided again into multiple fractions. Each of these fractions is then reacted with a third unique (fraction-specific) building block and a third unique oligonucleotide which encodes the building block. The building blocks can be coupled to produce linear or branched polymers or oligomers, such as peptides, peptidomimetics, and peptoids, or non-oligomeric mols., such as mols. comprising a scaffold structure to which is attached one or more addnl. chemical moieties. The number of unique mols. present in the product library is a function of (1) the number of different building blocks used at each step of the synthesis, and (2) the number of times the pooling and dividing process is repeated. The ability to amplify encoding oligonucleotide sequences using known methods such as PCR means that selected mols. can be identified even if relatively few copies are recovered. This allows the practical use of very large libraries, which, as a consequence of their high degree of complexity, either comprise relatively few copies of any given library member, or require the use of very large vols.

IT 1068160-30-4
 RL: PRPH (Prophetic)
 (Synthesis of combinatorial libraries containing encoding oligonucleotide tags)

RN 1068160-30-4 CAPLUS

CN Benzoic acid, 5-[[[1-carboxy-3-butyn-1-yl]amino]carbonyl]-2-(6-hydroxy-3-oxo-3H-xanthen-9-yl)- (CA INDEX NAME)



L7 ANSWER 18 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN

AN 2006:1033647 CAPLUS

DN 145:397383

TI Spirocyclic heterocyclic derivatives as δ -opioid receptor ligands

and their preparation, pharmaceutical compositions, and methods of their use

IN Dolle, Roland E.; Le Bourdonnec, Bertrand; Chu, Guo-Hua

PA Adolor Corporation, USA

SO PCT Int. Appl., 734pp.

CODEN: PIXXD2

DT Patent

LA English

FAN, CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|--|----------|------------------|----------|
| PI | WO 2006105442 | A2 | 20061005 | WO 2006-US12081 | 20060331 |
| | WO 2006105442 | A3 | 20070802 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| | RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | |
| | US 20060270695 | A1 | 20061130 | US 2006-393133 | 20060330 |
| | AU 2006230517 | A1 | 20061005 | AU 2006-230517 | 20060331 |
| | CA 2603126 | A1 | 20061005 | CA 2006-2603126 | 20060331 |
| | EP 1871761 | A2 | 20080102 | EP 2006-749077 | 20060331 |
| | R: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU | | | |
| | JP 2008534613 | T | 20080828 | JP 2008-504447 | 20060331 |
| | MX 2007011962 | A | 20071213 | MX 2007-11962 | 20070927 |
| | IN 2007KN04147 | A | 20080606 | IN 2007-KN4147 | 20071029 |
| | KR 2008005245 | A | 20080110 | KR 2007-725148 | 20071030 |
| | CN 101184749 | A | 20080521 | CN 2006-80019153 | 20071130 |
| PRAI | US 2005-667177P | P | 20050331 | | |
| | US 2006-393133 | A | 20060330 | | |
| | WO 2006-US12081 | W | 20060331 | | |
| OS | MARPAT 145:397383 | | | | |
| GI | | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Spirocyclic heterocyclic derivs. of formula I, pharmaceutical compns. containing these compds., and methods for their pharmaceutical use are disclosed. In certain embodiments, the spirocyclic heterocyclic derivs. are ligands of the δ -opioid receptor and may be useful, inter alia, for treating and/or preventing pain, anxiety, gastrointestinal disorders, and other δ opioid receptor-mediated conditions. Compds. of formula I wherein W2 is (un)substituted (hetero)aryl; R23 and R24 are independently H, and alkyl, provided that at least one of the groups are alkyl; A2 and B2 are independently H, and together form a double bond; X2 is CH2 and O; p is 1 and 2; and their stereoisomers, prodrugs, pharmaceutically acceptable salts, solvates, hydrates, acid salt hydrates, and N-oxides thereof are claimed. Example compds. (-)-II and (+)-II were prepared by hydrogenation of compound III to give the

spirotetrahydrobenzopyran derivative, which underwent resolution to give the optically active isomers, which underwent hydrolysis to give (-)- and (+)-II. All the invention compds. were evaluated for their opioid receptor inhibitory activity. From the assay, it was determined that (-)-II and (+)-II exhibited K_i values of 0.59 nM and 75 nM, resp. Compound (-)-II displayed potent in vitro δ agonistic activity with an EC_{50} value of 16.8 nM, while (+)-II displayed weaker in vitro agonist activity, EC_{50} of 1282 nM.

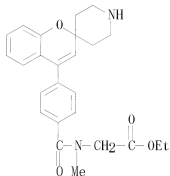
IT 850174-29-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of spirocyclic heterocyclic derivs. as δ -opioid receptor ligands useful as therapeutic agents)

RN 850174-29-7 CAPLUS

CN Glycine, N-methyl-N-(4-spiro[2H-1-benzopyran-2,4'-piperidin]-4-ylbenzoyl)-, ethyl ester (CA INDEX NAME)



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L7 ANSWER 19 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN

AN 2006:961768 CAPLUS

DN 147:32708

TI Synthesis and application of N-hydroxysuccinimidyl rhodamine B ester as an amine-reactive fluorescent probe

AU Meng, Qinghua; Yu, Meijuan; Zhang, Haifeng; Ren, Jicun; Huang, Deyin

CS School of Chemistry and Chemical Engineering, Shanghai Jiao Tong University, Shanghai, 200240, Peop. Rep. China

S0 Dyes and Pigments (2006), Volume Date 2007, 73(2), 254-260

CODEN: DYPIDX; ISSN: 0143-7208

PB Elsevier Ltd.

DT Journal

LA English

OS CASREACT 147:32708

AB A fluorescent probe (RB-S) containing the N-hydroxysuccinimidyl ester in 2 position was prepared from rhodamine B (RB) by one-step condensation reaction. The reactivity of the fluorescent probe with glycine was studied and the products were identified by LC-MS anal. The excessive equivalent of the RB-S was hydrolyzed to the corresponding carboxylic acids (RB). UV/vis and fluorescence spectra of the fluorescent probe (RB-S), the labeled derivative (RB-Gly) and the hydrolyzate (RB) were also studied. Fluorescence and absorption spectra appear as mirror images. The solvent effect on the spectra of the glycine derivative (RB-Gly) was investigated in methanol/water solution

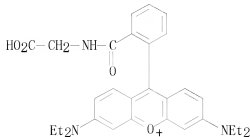
IT 794486-63-8P

RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST

(Analytical study); PREP (Preparation); USES (Uses)
 (application of N-hydroxysuccinimidyl rhodamine B ester as an
 amine-reactive fluorescent probe)

RN 794486-63-8 CAPLUS

CN Xanthylum, 9-[2-[[[(carboxymethyl)amino]carbonyl]phenyl]-3,6-
 bis(diethylamino)- (CA INDEX NAME)



OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 20 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2006:378829 CAPLUS

DN 145:58074

TI A broad-spectrum fluorescence-based peptide library for the rapid
 identification of protease substrates

AU Thomas, Daniel A.; Francis, Peter; Smith, Carla; Ratcliffe, Steven; Ede,
 Nicholas J.; Kay, Corinne; Wayne, Gareth; Martin, Steve L.; Moore, Keith;
 Amour, Augustin; Hooper, Nigel M.

CS Proteolysis Research Group, School of Biochemistry and Microbiology, Leeds
 Institute of Genetics, Health and Therapeutics, University of Leeds,
 Leeds, UK

S0 Proteomics (2006), 6(7), 2112-2120

CODEN: PROTC7; ISSN: 1615-9853

PB Wiley-VCH Verlag GmbH & Co. KGaA

DT Journal

LA English

AB Identification of peptide substrates for proteases can be a major
 undertaking. To overcome issues such as feasibility and deconvolution,
 associated with large peptide libraries, a small but smart generic
 fluorescence resonance energy transfer rapid endopeptidase profiling
 library (REPLi) was synthesized as a tool for rapidly identifying protease
 substrates. Within a tripeptide core, flanked by Gly residues, similar
 amino acids were paired giving rise to a relatively small library of 3375
 peptides divided into 512 distinct pools each containing only 8 peptides. The
 REPLi was validated with trypsin, pepsin, the matrix metalloprotease
 (MMP)-12 and MMP-13 and calpains-1 and -2. In the case of calpain-2, a
 single iteration step involving LC-MS, provided the definitive residue
 specificity from which a highly sensitive fluorogenic substrate,
 (FAM)-Gly-Gly-Gly-Gln-Leu-Tyr-Gly-Gly-DPA-Arg-Arg-Lys-(TAMRA), was then
 designed. The thorough validation of this small but smart peptide library
 with representatives from each of the four mechanistic protease classes
 indicates that the REPLi will be useful for the rapid identification of
 substrates for multiple proteases.

IT 891197-61-8

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(identification as a novel highly-sensitive FRET substrate for
 calpain-2; broad-spectrum fluorescence-based REPLi peptide library for

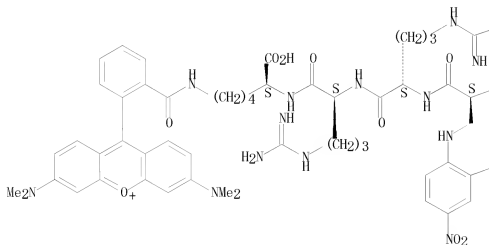
the rapid identification of proteinase substrates by FRET)

RN 891197-61-8 CAPLUS

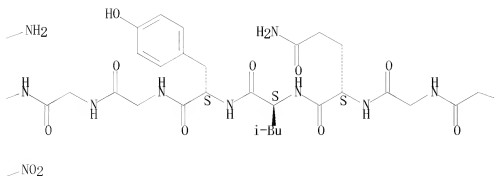
CN L-Lysine, N-[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)methyl]glycylglycylglycyl-L-glutamyl-L-leucyl-L-tyrosylglycylglycyl-3-[(2,4-dinitrophenyl)amino]-L-alanyl-L-arginyl-L-arginyl-N6-[2-[3,6-bis(dimethylamino)xanthylum-9-yl]benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

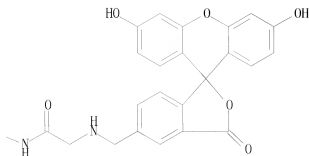
PAGE 1-A



PAGE 1-B



PAGE 1-C



OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 21 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2005:1151395 CAPLUS

DN 145:293260

TI Synthesis of novel piperidinyl linker based energy transfer terminators
and their potential use in DNA sequencing

AU Rao, T. Sudhakar; Nampalli, Satyam; Zhang, Weihong; Xiao, Haiguang; Kumar,
Shiv

CS G.E. Healthcare, Piscataway, NJ, USA

SO Nucleosides, Nucleotides & Nucleic Acids (2005), 24(5-7), 801-804

CODEN: NNAFY; ISSN: 1525-7770

PB Taylor & Francis, Inc.

DT Journal

LA English

OS CASREACT 145:293260

AB Synthesis of novel piperidinyl linker based ET cassettes and terminators
is described. These novel terminators are evaluated in the DNA sequencing
expts. using thermostable DNA polymerase.

IT 908259-36-9P

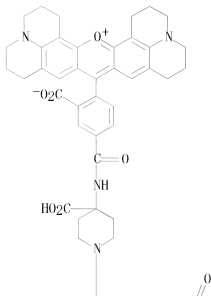
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(synthesis of novel piperidinyl linker based energy transfer
terminators and their potential use in DNA sequencing)

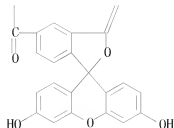
RN 908259-36-9 CAPLUS

CN 1H, 5H, 11H, 15H-Xantheno[2,3,4-ij:5,6,7-i'j']diquinolizin-18-ium,
9-[2-carboxy-4-[[[4-carboxy-1-[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-
1(3H),9'-[9H]xanthen]-5-yl)carbonyl]-4-piperidinylamino]carbonyl]phenyl]-
2,3,6,7,12,13,16,17-octahydro-, inner salt (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
 RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 22 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN
 AN 2005:1004902 CAPLUS
 DN 143:262496
 TI Specific substrates for O6- alkylguanine-DNA alkyltransferase
 IN Jaccard, Hughes; Johnsson, Kai; Kindermann, Maik; Sielaff, India Christina
 PA EPFL Ecole Polytechnique Federale De Lausanne, Switz.
 SO PCT Int. Appl., 78 pp.
 CODEN: PIXXD2

DT Patent
 LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|---|----------|-----------------|----------|
| PI | WO 2005085470 | A1 | 20050915 | WO 2005-EP50900 | 20050301 |
| | WO 2005085470 | A9 | 20061005 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, | | | |

GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1571224 A1 20050907 EP 2004-405124 20040302
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK

EP 1730298 A1 20061213 EP 2005-716866 20050301
 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR

JP 2007526282 T 20070913 JP 2007-501285 20050301
 US 20070243568 A1 20071018 US 2006-591162 20061003

PRAI EP 2004-405124 A 20040302
 WO 2005-EP50900 W 20050301

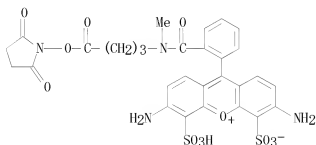
OS MARPAT 143:262496

AB The invention relates to substrates for 06-alkylguanine-DNA alkyltransferases (AGT) of formula R1-A-X-CH2-R3-R4-L1 (A = a group recognized by AGT as a substrate; X = O, S; R1 = -R2-L2, R5; R2, R4 = linker; R3 = aromatic or heteroarom. group, (substituted) unsatd. alkyl, cycloalkyl or heterocyclyl group with the double bond connected to CH2; R5 = arylmethyl, heteroarylmethyl, (substituted) cycloalkyl, cycloalkenyl or heterocyclyl group; L1 = label, plurality of same or different labels, bond connecting R4 to A forming a cyclic substrate, further group -R3-CH2-X-A-R1; L2 = label, plurality of same or different labels). The invention further relates to methods of transferring a label from these substrates to AGT and AGT fusion proteins.

IT 863772-22-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (specific substrates for 06- alkylguanine-DNA alkyltransferase)

RN 863772-22-9 CAPLUS

CN Xanthylum, 3,6-diamino-9-[2-[[[4-[(2,5-dioxo-1-pyrrolidinyl)oxy]-4-oxobutyl]methylamino]carbonyl]phenyl]-4,5-disulfo-, inner salt (CA INDEX NAME)



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
 RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 23 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN
 AN 2005:951049 CAPLUS
 DN 143:262494
 TI Doubly-labeled fluorogenic hydrophobic peptide substrates for the detection of protease activity in biological sample

IN Komoriya, Akira; Packard, Beverly S.
 PA Onco Immunin, Inc., USA
 SO U.S., 178 pp., Cont.-in-part of Appl. No. PCT/US98/03000.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN, CNT 6

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|--|----------|-----------------|----------|
| PI | US 6936687 | B1 | 20050830 | US 1999-394019 | 19990910 |
| | US 6037137 | A | 20000314 | US 1997-802981 | 19970220 |
| | WO 9837226 | A1 | 19980827 | WO 1998-US3000 | 19980220 |
| | W: | AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW | | | |
| | RW: | GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | |
| | CA 2384021 | A1 | 20010315 | CA 2000-2384021 | 20000911 |
| | WO 2001018238 | A1 | 20010315 | WO 2000-US24882 | 20000911 |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| EP | 1214445 | A1 | 20020619 | EP 2000-961782 | 20000911 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | | |
| | JP 2003508080 | T | 20030304 | JP 2001-521773 | 20000911 |
| | US 20030207264 | A1 | 20031106 | US 2000-747287 | 20001222 |
| | US 6893868 | B2 | 20050517 | | |
| | US 20040096926 | A1 | 20040520 | US 2001-874350 | 20010604 |
| | US 7312302 | B2 | 20071225 | | |
| | US 20050158766 | A1 | 20050721 | US 2004-15864 | 20041215 |
| | US 7541143 | B2 | 20090602 | | |
| | AU 2006200291 | A1 | 20060223 | AU 2006-200291 | 20060123 |
| | US 20080199898 | A1 | 20080821 | US 2007-941766 | 20071116 |
| | JP 2008167757 | A | 20080724 | JP 2008-21366 | 20080131 |
| PRAI | US 1997-802981 | A2 | 19970220 | | |
| | WO 1998-US3000 | A2 | 19980220 | | |
| | JP 1998-536778 | A3 | 19980220 | | |
| | US 1999-394019 | A | 19990910 | | |
| | AU 2000-73688 | A3 | 20000911 | | |
| | WO 2000-US24882 | W | 20000911 | | |
| | US 2000-747287 | A3 | 20001222 | | |
| | US 2001-874350 | A3 | 20010604 | | |
| OS | MARPAT 143:262494 | | | | |

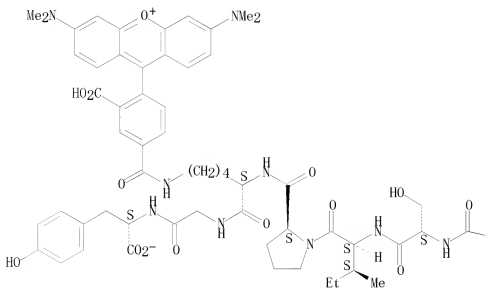
AB The present invention provides for novel reagents whose fluorescence increases in the presence of particular proteases. The reagents comprise a characteristically folded peptide backbone each end of which is conjugated to a fluorophore. When the folded peptide is cleaved, as by digestion with a protease, the fluorophores provide a high intensity fluorescent signal at a visible wavelength. It was found that the peptide backbones doubly labeled with one fluorophore still achieve fluorescence quenching thus suggesting quenching through another mechanism besides

resonance energy transfer. An addnl. discovery of this invention is that attachment of a hydrophobic protecting group to a polypeptide enhances uptake of that polypeptide by a cell. Because of their high fluorescence signal in the visible wavelengths, these protease indicators are particularly well suited for detection of protease activity in biol. samples, in particular in frozen tissue sections. Thus this invention also provides for methods of detecting protease activity in situ in frozen sections. In one example, the protease indicator having the formula F1-Asp-Ala-Ile-Pro-Nle-Ser-Ile-Pro-Cys-F2, where F1 is a donor fluorophore (5'-carboxytetramethylrhodamine) linked to aspartic acid via the α -amino group and F2 is an acceptor fluorophore (rhodamine X acetamide (R492)) linked via the sulfhydryl group of the cysteine, exhibits changes in emission spectrum after addn of elastase.

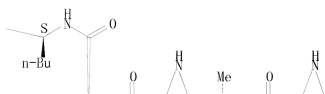
IT 205176-31-4 212207-37-9 212268-88-7D,
conjugates with rhodamine X 691868-33-4
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(doubly-labeled fluorogenic peptide substrates for detection of
protease activity in biol. sample)
RN 205176-31-4 CAPLUS
CN L-Tyrosine, N-[4-[3, 6-bis(dimethylamino)xanthylium-9-yl]-3-carboxybenzoyl]-
L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-
isoleucyl-L-prolyl-N6-[4-[3, 6-bis(dimethylamino)xanthylium-9-yl]-3-
carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

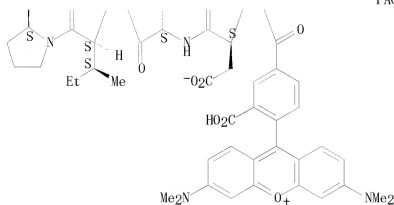
PAGE 1-A



PAGE 1-B



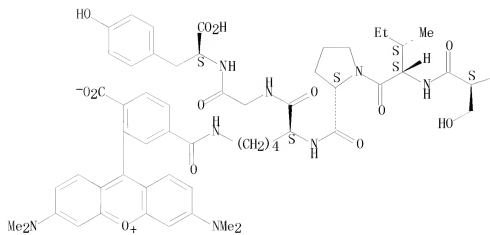
PAGE 2-B



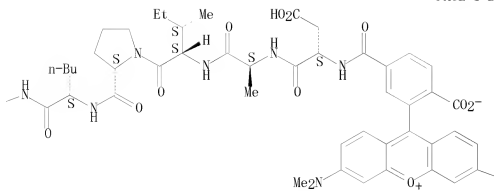
RN 212207-37-9 CAPLUS
 CN L-Tyrosine, N-[3-[3,6-bis(dimethylamino)xanthylum-9-yl]-4-carboxybenzoyl]-
 L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-
 isoleucyl-L-prolyl-N6-[3-[3,6-bis(dimethylamino)xanthylum-9-yl]-4-
 carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

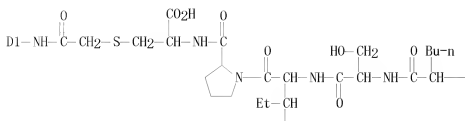
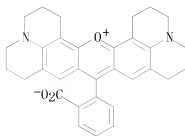


PAGE 1-C

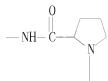
NMe2

CN L-Cysteine, N-[4-[3,6-bis(dimethylamino)xanthylium-9-yl]-3-carboxybenzoyl]-L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-isoleucyl-L-prolyl-S-[2-[[[3(or 4)-carboxy-4(or 3)-(2,3,6,7,12,13,16,17-octahydro-1H,5H,11H,15H-xantheno[2,3,4-ij:5,6,7-i',j']diquinolizin-18-ium-9-yl)phenyl]amino]-2-oxoethyl]-, bis(inner salt) (9CI) (CA INDEX NAME)

PAGE 1-A



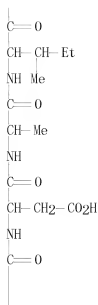
PAGE 1-B



PAGE 2-A



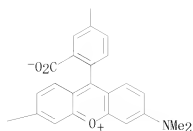
PAGE 2-B



PAGE 3-A

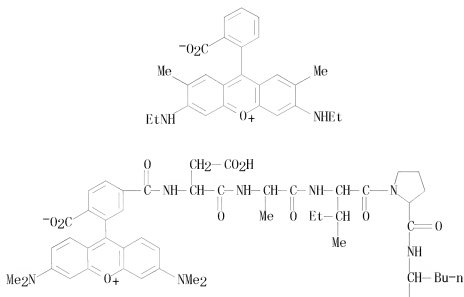


PAGE 3-B

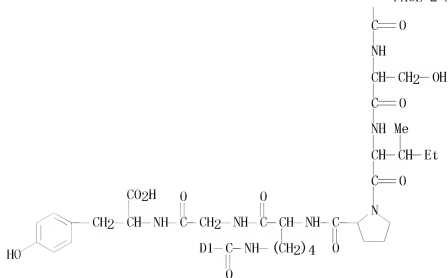


RN 691868-33-4 CAPLUS
 CN L-Tyrosine, N-[3-[3,6-bis(dimethylamino)xanthylium-9-yl]-4-carboxybenzoyl]-L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-isoleucyl-L-prolyl-N6-[3(or 4)-[3,6-bis(ethylamino)-2,7-dimethylxanthylium-9-yl]-4(or 3)-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9Cl) (CA INDEX NAME)

PAGE 1-A



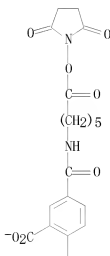
PAGE 2-A



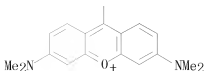
OSC. G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)
 RE. CNT 78 THERE ARE 78 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 24 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 2005:329978 CAPLUS
 DN 143:26787
 TI 1D arrangement of Au nanoparticles by the helical structure of
 schizophyllan: A unique encounter of a natural product with inorganic
 compounds
 AU Bae, Ah-Hyun; Numata, Munenori; Hasegawa, Teruaki; Li, Chun; Kaneko,
 Kenji; Sakurai, Kazuo; Shinkai, Seiji
 CS Department of Chemistry and Biochemistry Graduate School of Engineering,
 Kyushu University, Fukuoka, 812-8581, Japan
 S0 Angewandte Chemie, International Edition (2005), 44(13), 2030-2033
 CODEN: AClEF5; ISSN: 1433-7851
 PB Wiley-VCH Verlag GmbH & Co. KGaA
 DT Journal
 LA English
 OS CASREACT 143:26787
 AB Forming an orderly line: Au nanoparticles can be aligned in one dimension
 by their incorporation into the helical structure of a natural
 polysaccharide, schizophyllan. The hydrophobic inner cavity of the helix
 hosts the hydrophobic nanoparticles and aligns the guests along its length
 (≈ 200 nm).
 IT 380304-22-3 457075-12-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (1D inclusion arrangement of Au nanoparticles by the helical structure
 of schizophyllan)
 RN 380304-22-3 CAPLUS
 CN Xanthylum, 9-[2-carboxy-4-[[[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-
 oxohexyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (CA
 INDEX NAME)

PAGE 1-A

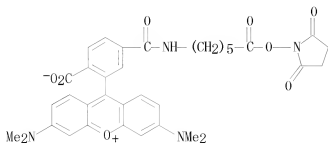


PAGE 2-A



RN 457075-12-6 CAPLUS

CN Xanthylum, 9-[2-carboxy-5-[[[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (CA INDEX NAME)



OSC.G 31 THERE ARE 31 CAPLUS RECORDS THAT CITE THIS RECORD (31 CITINGS)

RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 25 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2005:324133 CAPLUS

DN 142:411250

TI Preparation of 3-azaspiro[5.5]undecanes and related compounds as δ
opioid receptor ligands

IN Dolle, Roland E.; Le Bourdonnec, Bertrand; Ajello, Christopher W.; Gu,
Minghua; Chu, Guo-Hua; Tuthill, Paul Anson; Leister, Lara K.; Zhou, Jean
Q.

PA Adolor Corporation, USA

S0 PCT Int. Appl., 573 pp.

CODEN: PIXXD2

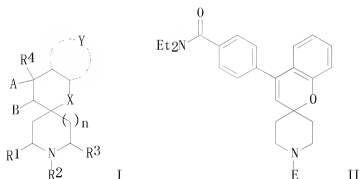
DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|--|----------|-----------------|----------|
| PI | WO 2005033073 | A2 | 20050414 | WO 2004-US32479 | 20041001 |
| | WO 2005033073 | A3 | 20050728 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| | RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| | AU 2004278414 | A1 | 20050414 | AU 2004-278414 | 20041001 |

| | | | | |
|---|----|----------|------------------|----------|
| CA 2541014 | A1 | 20050414 | CA 2004-2541014 | 20041001 |
| US 20050159438 | A1 | 20050721 | US 2004-957554 | 20041001 |
| US 7338962 | B2 | 20080304 | | |
| EP 1675847 | A2 | 20060705 | EP 2004-817130 | 20041001 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR | | | | |
| BR 2004015165 | A | 20070109 | BR 2004-15165 | 20041001 |
| CN 1922169 | A | 20070228 | CN 2004-80035690 | 20041001 |
| JP 2007507532 | T | 20070329 | JP 2006-534173 | 20041001 |
| MX 2006003639 | A | 20061020 | MX 2006-3639 | 20060331 |
| IN 2006DN02347 | A | 20070803 | IN 2006-DN2347 | 20060427 |
| ZA 2006003414 | A | 20080227 | ZA 2006-3414 | 20060428 |
| KR 2007019959 | A | 20070216 | KR 2006-708451 | 20060501 |
| US 20080102031 | A1 | 20080501 | US 2007-960845 | 20071220 |
| US 7563802 | B2 | 20090721 | | |
| PRAI US 2003-507864P | P | 20031001 | | |
| US 2004-957554 | A1 | 20041001 | | |
| WO 2004-US32479 | W | 20041001 | | |
| OS CASREACT 142:411250; MARPAT 142:411250 | | | | |
| GI | | | | |



AB Title compds. I [X = CH₂, O, S, etc.; Y = (CH₂)_n; n = 0-3; Z = 6-membered aryl, 5- or 6-membered heteroaryl ring with provisos; R1, R3 = H, alkyl, alkenyl, etc.; R2 = H, alkyl, alkenyl, etc.; R4 = Q-W; Q = single bond, C(Ra) (Rb), C(Ra) (Rb)C(Ra) (Rb), etc.; Ra = H, alkyl; Rb = H, alkyl, aryl; W = aryl, heteroaryl; A, B = H, F, alkyl, etc.] and their pharmaceutically acceptable salts were prepared. For example, acid deprotection of Boc-amine II (E = Boc), e.g., prepared from o-hydroxybenzoic acid in 3-steps, afforded the HCl salt of azaspirodecane II (E = H) in 99% yield. In human δ opioid receptor inhibition assays, 14-examples of compds. I exhibited K_i values ranging from 0.36-54 nM, e.g., the K_i value of azaspirodecane hydrochloride II (E = H) was 0.93 nM.

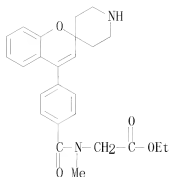
IT 850174-29-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of azaspirodecanes and related compds. as δ opioid receptor ligands)

RN 850174-29-7 CAPLUS

CN Glycine, N-methyl-N-(4'-spiro[2H-1-benzopyran-2,4'-piperidin]-4-ylbenzoyl)-, ethyl ester (CA INDEX NAME)



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
 RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 26 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 2005:36489 CAPLUS
 DN 142:110067
 TI Fluorescent ligands for G protein-coupled receptor arrays
 IN Fang, Ye; Hong, Yulong; Peng, Jinlin
 PA USA
 S0 U.S. Pat. Appl. Publ., 22 pp.
 CODEN: USXXCO

DT Patent
 LA English
 FAN.CNT 4

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------|--|----------|-----------------|----------|
| PI | US 20050009205 | A1 | 20050113 | US 2003-741213 | 20031219 |
| | WO 2005066633 | A2 | 20050721 | WO 2004-US41935 | 20041213 |
| | WO 2005066633 | A3 | 20060216 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| PRAI | RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| | US 20060148101 | A1 | 20060706 | US 2006-363400 | 20060227 |
| | US 20070238197 | A9 | 20071011 | | |
| | US 2003-486592P | P | 20030711 | | |
| AB | US 2001-854786 | A2 | 20010514 | | |
| | US 2003-639718 | A2 | 20030812 | | |
| | US 2003-741213 | A | 20031219 | | |

A fluorescent ligand includes a material having a binding affinity in the range of about 0.01 to about 25 nM, or about 0.1 to about 10 nM; a specificity to its cognate receptor in the range of about 50 to about 99%, or about 65 to about 99%; a cross-activity to other receptors of 0 to about 20%, or 0 to about 10%; a net charge per ligand of about -3 to about +5, or more preferably, about -2 to about +2 or most preferably for small compound ligands about -1 to about +2. The ligand may also have a hydrophobicity in the range of about 3 to about 55 min eluting time (as measured under specified eluting conditions). Thus, motilin 1-16 was

labeled with Bodipy-TMR, rhodamine or Cy5 and used to screen motilin receptor arrays. Cy5-naltrexone was used for screening $\delta 2$ opioid receptors and Cy5-neurotensin 2-13, NTR1 receptors.

IT 821794-65-4

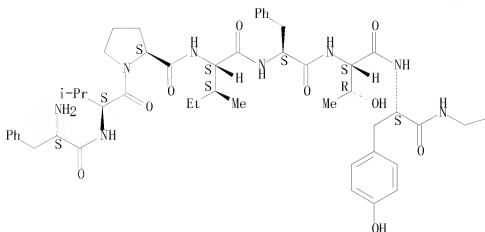
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (fluorescent ligands for G protein-coupled receptor arrays)

RN 821794-65-4 CAPLUS

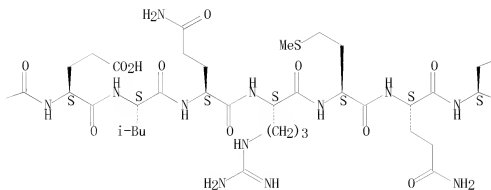
CN L-lysine, L-phenylalanyl-L-valyl-L-prolyl-L-isoleucyl-L-phenylalanyl-L-threonyl-L-tyrosylglycyl-L- α -glutamyl-L-leucyl-L-glutamyl-L-arginyl-L-methionyl-L-glutamyl-L- α -glutamyl-N6-[3-[3,6-bis(ethylamino)-2,7-dimethylxanthylum-9-yl]-4-carboxybenzoyl]-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

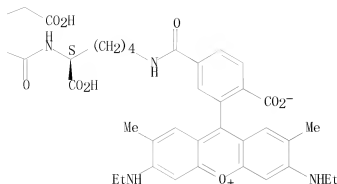
PAGE 1-A



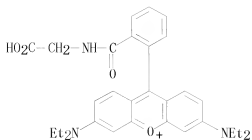
PAGE 1-B



PAGE 1-C



L7 ANSWER 27 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 2004:985429 CAPLUS
 DN 143:165621
 TI Study on novel fluorescent probe containing rhodamine structure. (I) -
 tautomerism and spectroscopic characteristics
 AU Yu, Mei-juan; Meng, Qing-hua; Zheng, Yi-ning; Zhang, Hai-feng; Zeug, Yuan
 CS Sch. Chem. Chem. Eng., Shanghai Jiaotong Univ., Shanghai, 200240, Peop.
 Rep. China
 SO Ranliao Yu Ranse (2004), 41(4), 187-190
 CODEN: RYRAAY; ISSN: 1672-1179
 PB Ranliao Yu Ranse Bianjibu
 DT Journal
 LA Chinese
 AB Rhodamine B N-succinimidyl ester is a novel amine reactive fluorescent
 probe. Both UV/visible spectra and fluorescence spectra of the labeled
 compds. were studied in different pH media. The correlation between
 protonation, tautomerism and spectra properties is discussed.
 N-substituted rhodamine amides would readily change to nonfluorescent
 spirolactams in alkaline or neutral medium.
 IT 794486-63-8
 RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation,
 nonpreparative)
 (tautomerism and spectroscopic properties of derivs. of amines and
 Rhodamine B succinimidyl ester fluorescent probe)
 RN 794486-63-8 CAPLUS
 CN Xanthylium, 9-[2-[[[(carboxymethyl)amino]carbonyl]phenyl]-3,6-
 bis(diethylamino)- (CA INDEX NAME)



L7 ANSWER 28 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2004:878499 CAPLUS

DN 141:328168

TI Acyl-phosphate probes, methods for their synthesis, and their use in protein labeling

IN Campbell, David Alan; Liyanage, Marek; Szardenings, Anna Katrin; Wu, Min

PA Activx Biosciences, Inc., USA

S0 PCT Int. Appl., 117 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN, CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|--|----------|-----------------|----------|
| PI | WO 2004090154 | A2 | 20041021 | WO 2004-US10075 | 20040401 |
| | WO 2004090154 | A3 | 20050506 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| | RW: | BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MK, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| | AU 2004227362 | A1 | 20041021 | AU 2004-227362 | 20040401 |
| | AU 2004227362 | B2 | 20080626 | | |
| | CA 2521130 | A1 | 20041021 | CA 2004-2521130 | 20040401 |
| | US 20050043507 | A1 | 20050224 | US 2004-817454 | 20040401 |
| | US 7365178 | B2 | 20080429 | | |
| | EP 1616034 | A2 | 20060118 | EP 2004-758736 | 20040401 |
| PRAI | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR | | | JP 2006-509592 | 20040401 |
| | JP 2006526010 | T | 20061116 | | |
| | US 2003-459797P | P | 20030401 | | |
| | WO 2004-US10075 | A | 20040401 | | |
| OS | MARPAT 141:328168 | | | | |

AB The present invention provides tagged acyl phosphate probes ('TAPPS'), and methods of their preparation and use. The subject methods and compns. can provide enhanced simplicity and accuracy in identifying changes in the presence, amount, or activity of target proteins in a complex protein mixture, preferably nucleotide binding proteins using nucleotide binding protein-directed TAPPS. The profiling methods described herein can have a number of steps leading to the identification of target nucleotide binding protein(s) in a complex protein mixture. Thus, 32 different nucleotides

labeled via a phosphate group with fluorophores or biotin were synthesized. These were used to label protein mixts. Labeled nucleotide-binding proteins were isolated by affinity chromatog. and identified by mass spectrometry.

IT 773149-33-0P 773149-34-1P 773149-35-2P
773149-36-3P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);
BIOL (Biological study); PREP (Preparation)

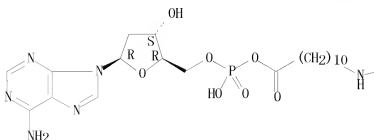
(acyl-phosphate probes, methods for their synthesis, and their use in protein labeling)

RN 773149-33-0 CAPLUS

CN 5'-Adenylic acid, 2'-deoxy-, monoanhydride with
9-[2-carboxy-5-[[[(10-carboxydeacyl)amino]carbonyl]phenyl]-3,6-bis(dimethylamino)xanthylum inner salt (9CI) (CA INDEX NAME)

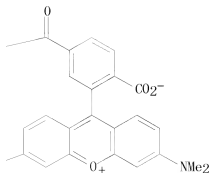
Absolute stereochemistry.

PAGE 1-A



Me2N

PAGE 1-B

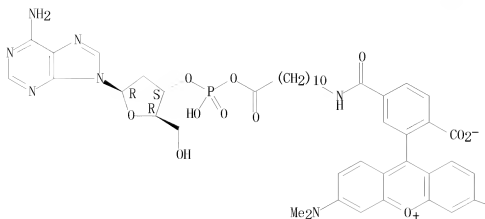


RN 773149-34-1 CAPLUS

CN 3'-Adenylic acid, 2'-deoxy-, monoanhydride with
9-[2-carboxy-5-[[[(10-carboxydeacyl)amino]carbonyl]phenyl]-3,6-bis(dimethylamino)xanthylum inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



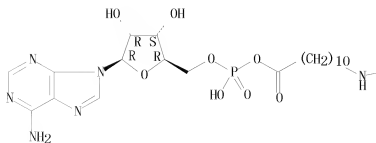
PAGE 1-B

NMe₂

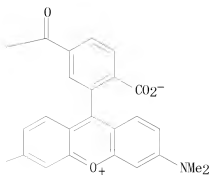
RN 773149-35-2 CAPLUS
 CN 5'-Adenylic acid, monoanhydride with
 9-[2-carboxy-5-[[[(10-carboxydecyl)amino]carbonyl]phenyl]-3,6-
 bis(dimethylamino)xanthylum inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

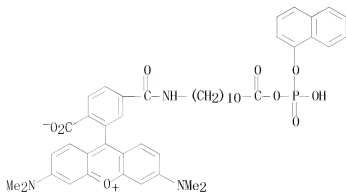
PAGE 1-A

Me₂N

PAGE 1-B



RN 773149-36-3 CAPLUS
 CN Xanthylum, 9-[2-carboxy-5-[[[11-[[hydroxy(1-naphthalenyloxy)phosphinyl]oxy]-11-oxoundecyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (CA INDEX NAME)



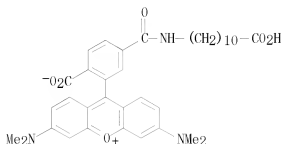
IT 773149-32-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(acyl-phosphate probes, methods for their synthesis, and their use in protein labeling)

RN 773149-32-9 CAPLUS

CN Xanthylum, 9-[2-carboxy-5-[[[10-carboxydecyl)amino]carbonyl]phenyl]-3, 6-bis(dimethylamino)-, inner salt (CA INDEX NAME)



L7 ANSWER 29 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2004:802571 CAPLUS

DN 141:301460

TI Heterobifunctional polymeric bioconjugates

IN Greenwald, Richard B.; Zhao, Hong

PA Enzon Pharmaceuticals, Inc., USA

S0 U.S. Pat. Appl. Publ., 39 pp.

CODEN: USXXCO

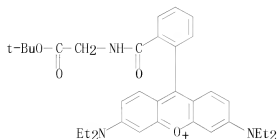
DT Patent

LA English

FAN. CNT 1

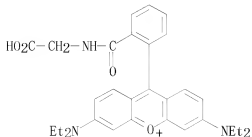
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|----------|------------------|-----------------|----------|
| PI | US 20040192769 | A1 | 20040930 | US 2003-394393 | 20030321 |
| | US 7332164 | B2 | 20080219 | | |
| | AU 2004223952 | A1 | 20041007 | AU 2004-223952 | 20040312 |
| | CA 2517459 | A1 | 20041007 | CA 2004-2517459 | 20040312 |
| | WO 2004085386 | A2 | 20041007 | WO 2004-US7599 | 20040312 |
| | WO 2004085386 | A3 | 20041223 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AE, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, NS, TD, TG | | | | | |
| EP 1605953 | A2 | 20051221 | EP 2004-720371 | | 20040312 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK | | | | |
| CN 1761473 | A | 20060419 | CN 2004-80007673 | | 20040312 |
| JP 2006523256 | T | 20061012 | JP 2006-507123 | | 20040312 |
| NZ 542138 | A | 20090131 | NZ 2004-542138 | | 20040312 |
| RU 2361596 | C2 | 20090720 | RU 2005-132471 | | 20040312 |
| IN 2005MN00989 | A | 20060519 | IN 2005-MN989 | | 20050912 |
| FI 2005000932 | A | 20050919 | FI 2005-932 | | 20050919 |
| MX 2005010118 | A | 20060308 | MX 2005-10118 | | 20050921 |

US 20080076792 A1 20080327 US 2007-861091 20070925
 PRAI US 2003-394393 A 20030321
 WO 2004-US7599 A 20040312
 OS MARPAT 141:301460
 AB Heterobifunctional polymeric prodrug platforms for delivering biol. active compds., such as proteins, monoclonal antibodies, drugs, peptides, enzymes, oligonucleotides, steroids and lipids, or diagnostic agent selected from green fluorescent protein (GFP), dyes, chelating agents, and isotope-labeled compds. are disclosed. Methods of making and using the compds. and conjugates described herein are also provided. For example, the preparation of a monoclonal antibody CC 49 conjugate with PEG derivative is presented.
 IT 765301-46-0P 765301-47-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of heterobifunctional polymeric bioconjugates for therapy and diagnostics)
 RN 765301-46-0 CAPLUS
 CN Xanthylum, 3,6-bis(diethylamino)-9-[2-[[[2-(1,1-dimethylethoxy)-2-oxoethyl]amino]carbonyl]phenyl]-, chloride (1:1) (CA INDEX NAME)



● Cl⁻

RN 765301-47-1 CAPLUS
 CN Xanthylum, 9-[2-[[[(carboxymethyl)amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)



● Cl⁻

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
 RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 30 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN
 AN 2004:729640 CAPLUS
 DN 141:256957
 TI Fluorogenic protease substrates based on dye-dimerization
 IN Wei, Ai-ping; Williams, Michael George
 PA 3M Innovative Properties Company, USA
 SO U.S., 11 pp., Cont.-in-part of U.S. Ser. No. 846,828, abandoned.
 CODEN: USXXAM

DT Patent
 LA English

FAN, CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | US 6787329 | B1 | 20040907 | US 1999-448633 | 19991124 |
| | CN 1254383 | A | 20000524 | CN 1997-182147 | 19970908 |
| | US 20050089946 | A1 | 20050428 | US 2004-930522 | 20040831 |
| | US 7256012 | B2 | 20070814 | | |
| PRAI | US 1997-846828 | B2 | 19970501 | | |
| | US 1999-448633 | A1 | 19991124 | | |

OS MARPAT 141:256957

AB A method of biol. assay comprises the steps of providing an enzyme substrate comprising two fluorescence dye groups bound to a flexible peptide, the dye groups being of proximity sufficiently close so as to allow free energy attractions to draw the dyes together to essentially self-quench fluorescence of the dye groups, wherein self quenching of fluorescence of the dye groups is effected by dye dimerization or stacking, and enzymically cleaving the peptide to release the fluorescence dye groups from dye dimerization or stacking, thereby producing an increase in fluorescence intensity. A protease substrate for use in the method of the invention is also disclosed. This invention finds use in detection and identification of microorganisms, sterilization assurance, pharmaceutical discovery, enzyme assays, immunoassays, and other biol. assays. *Vibrio parahaemolyticus* was detected using TMR-Val-Pro-Arg-Gly-Lys-TMR. Cleavage by the trypsin-like enzyme of the microorganism produced an increase in fluorescence.

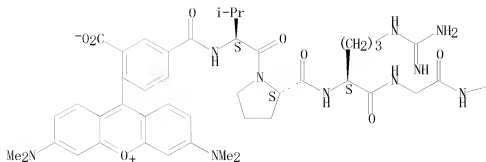
IT 216006-99-4P
 RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); ANST
 (Analytical study); BIOL (Biological study); PREP (Preparation); RACT
 (Reactant or reagent); USES (Uses)
 (protease substrate; fluorogenic protease substrates based on
 dye-dimerization for use as assay reagents)

RN 216006-99-4 CAPLUS

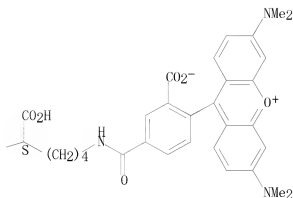
CN L-Lysine, N-[3-carboxy-4-[3,6-bis(dimethylamino)xanthylum-9-yl]benzoyl]-L-valyl-L-prolyl-L-arginylglycyl-N6-[3-carboxy-4-[3,6-bis(dimethylamino)xanthylum-9-yl]benzoyl]-, bis(inner salt) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



RE. CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 31 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN
AN 2004:534267 CAPLUS
DN 141:90502
TI Carboxamide-substituted dyes for analytical applications
IN Arden-Jacob, Jutta; Drexhage, Karl-Heinz; Hamers-Schneider, Monika;
Kemnitz, Norbert; Zilles, Alexander
PA Atto-Tec GmbH, Germany
SO PCT Int. Appl., 62 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN. CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------|---|----------|-----------------|----------|
| PI WO 2004055117 | A2 | 20040701 | WO 2003-EP14534 | 20031218 |
| WO 2004055117 | A3 | 20040819 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, | | | |

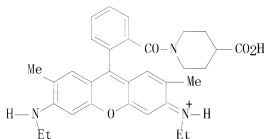
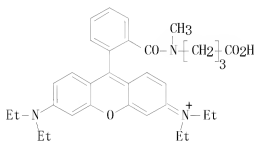
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO,
 NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
 TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
 BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
 ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10259374 A1 20040708 DE 2002-10259374 20021218
 AU 2003300216 A1 20040709 AU 2003-300216 20031218
 EP 1576059 A2 20050921 EP 2003-799491 20031218

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

US 20060154251 A1 20060713 US 2005-539790 20050617
 PRAI DE 2002-10259374 A 20021218
 WO 2003-EP14534 W 20031218

OS CASREACT 141:90502; MARPAT 141:90502
 GI



AB Fluorescent dyes (mostly rhodamine, thiorhodamine, selenorhodamine, rhodol, carbopyronine, triphenylmethane and amidopyrilium derivs.) with improved water solubility, in which lactone or lactam group group is modified with carboxamide-group, such as I (including multichromophore-containing mols., such as bichromophoric II) are useful for anal. application in vivo and in vitro, in labeling and diagnostic systems, in immunol. and nucleic acid hybridization method, and in peptide, polypeptide, nucleic acid and its analog, nucleoside, nucleotide and hapten conjugates. These dyes are prepared by reacting lactone or lactam form of these dyes (activated by interaction with imides) with secondary amines at 23° -60° in aprotic solvents. Thus, mixing 1 g of Rhodamine B chloride, 0.7 mg of 0-(N-succinimidyl)-N,N,N',N'-tetramethyluronium tetrafluoroborate (III) and 0.7 mL N-ethyl-diisopropylamine (IV) in acetonitrile 2 h at room temperature gives after appropriate treatment and drying 0.8 g of rhodamine B NHS-ester (V). Heating 0.5 g of V, 0.25 g of butanoic acid 4-(methylanino)-hydrochloride and 0.27 mL of IV in 40 mL of acetonitrile gives 0.3 g of I. The conjugate of I with cysteine is prepared by treatment

of aminoethyl maleimide of I (prepared from V by mixing 5 h at room temperature with IV and aminoethyl maleic acid imide) solution in EtOH with cysteine for 2 h at room temperature and adding 50 mL of NaClO4 solution

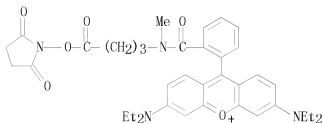
IT 713519-85-8P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(carboxamide-substituted fluorescent dye manufacture for anal. applications)

RN 713519-85-8 CAPLUS

CN Xanthylum, 3,6-bis(diethylamino)-9-[2-[[[4-[(2,5-dioxo-1-pyrrolidinyl)oxy]-4-oxobutyl]methylamino]carbonyl]phenyl]- (CA INDEX NAME)



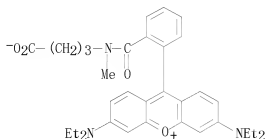
IT 713519-61-0P

RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(carboxamide-substituted fluorescent dye manufacture for anal. applications)

RN 713519-61-0 CAPLUS

CN Xanthylum, 9-[2-[[[3-(3-carboxypropyl)methylamino]carbonyl]phenyl]-3,6-bis(diethylamino)-, inner salt (CA INDEX NAME)



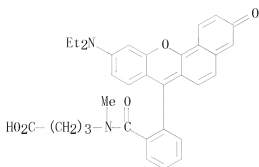
IT 713519-70-1P 713519-80-3P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

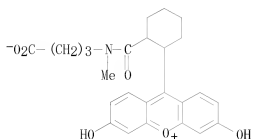
(carboxamide-substituted fluorescent dye manufacture for anal. applications)

RN 713519-70-1 CAPLUS

CN Butanoic acid, 4-[[[2-[10-(diethylamino)-3-oxo-3H-benzo[c]xanthen-7-yl]benzoyl]methylamino]- (CA INDEX NAME)



RN 713519-80-3 CAPLUS
 CN Xanthylium, 9-[2-[(3-carboxypropyl)methylamino]carbonyl]cyclohexyl]-3,6-dihydroxy-, inner salt (CA INDEX NAME)



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
 RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

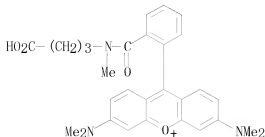
L7 ANSWER 32 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN
 AN 2004:481799 CAPLUS
 DN 141:39726
 TI Rhodamine-based fluorophores useful as labeling reagents
 IN Chiarello, Ronald H.; Liu, Wing; Yokobata, Kathy E.
 PA Syngen, Inc., USA
 SO U.S., 13 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|------------------|------|----------|------------------|----------|
| PI | US 6750357 | B1 | 20040615 | US 1999-344226 | 19990625 |
| | TW 277619 | B | 20070401 | TW 2000-89112501 | 20000707 |
| | US 20030104380 | A1 | 20030605 | US 2001-894423 | 20010628 |
| | US 20040234957 | A9 | 20041125 | | |
| | US 7183405 | B2 | 20070227 | | |
| PRAI | US 1999-344226 | A | 19990625 | | |
| OS | MARPAT 141:39726 | | | | |

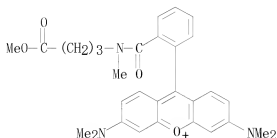
AB Fluorescent dyes based on rhodamine are derivatized to form labeled conjugates that fluoresce upon excitation with light of an appropriate wavelength. Particularly preferred embodiments are certain single isomer form rhodamine phosphoramidites. These rhodamine phosphoramidites enhance the efficiency of synthesizing rhodamine-labeled oligonucleotides by solid phase methods. Conjugate embodiments of the invention are prevented from

being converted to a non-fluorescent lactam form due to having a fully substituted amide linkage derived from the 3-position carboxylate.

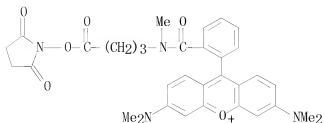
- IT 702686-39-3P 702686-40-6P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of rhodamine-based fluorophores useful as labeling reagents)
 RN 702686-39-3 CAPLUS
 CN Xanthylum, 9-[2-[[[3-carboxypropyl)methylamino]carbonyl]phenyl]-3,6-bis(dimethylamino)- (CA INDEX NAME)



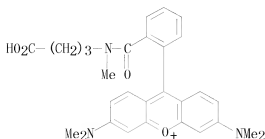
- RN 702686-40-6 CAPLUS
 CN Xanthylum, 3,6-bis(dimethylamino)-9-[2-[[[4-methoxy-4-oxobutyl)methylamino]carbonyl]phenyl]- (CA INDEX NAME)



- IT 435304-72-6P 702686-39-3DP, reaction products with functional pore glass
 RL: IMF (Industrial manufacture); RGT (Reagent); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of rhodamine-based fluorophores useful as labeling reagents)
 RN 435304-72-6 CAPLUS
 CN Pyrroldinium, 3,6-bis(dimethylamino)-9-[2-[[[4-[(2,5-dioxo-1-pyrroldinyl)oxy]-4-oxobutyl)methylamino]carbonyl]phenyl]- (CA INDEX NAME)



RN 702686-39-3 CAPLUS
 CN Xanthylum, 9-[2-[[[3-carboxypropyl)methylamino]carbonyl]phenyl]-3,6-bis(dimethylamino)- (CA INDEX NAME)

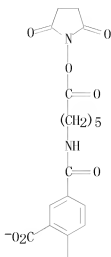


RE. CNT 90 THERE ARE 90 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

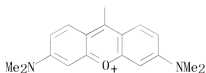
L7 ANSWER 33 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 2004:459212 CAPLUS
 DN 141:153303
 TI Dye-Labeled Benzodiazepines: Development of Small Ligands for Receptor Binding Studies Using Fluorescence Correlation Spectroscopy
 AU Hegener, Oliver; Jordan, Randolph; Haeberlein, Hanns
 CS Department of Pharmaceutical Biology, Philipps-University of Marburg, Marburg, D-35032, Germany
 SO Journal of Medicinal Chemistry (2004), 47(14), 3600-3605
 CODEN: JMCMAR; ISSN: 0022-2623
 PB American Chemical Society
 DT Journal
 LA English
 OS CASREACT 141:153303
 AB To investigate benzodiazepine receptor binding studies by fluorescence correlation spectroscopy (FCS), the four fluorophores fluorescein, tetramethylrhodamine, Oregon Green 488, and Alexa 532 were coupled to the benzodiazepine Ro 07-1986/602 (Ro). Binding assays to polyclonal antibodies to benzodiazepines and at the native benzodiazepine receptor on the membrane of rat hippocampal neurons were established to examine the dye-labeled ligands for their benzodiazepine character and their binding behavior. Both the fluorescein and the Oregon Green 488 moiety led to a loss of the benzodiazepine receptor binding of the corresponding Ro derivs. Antibody recognition and interactions to the receptor were observed for the tetramethylrhodamine derivative ($K_D = 96.0 \pm 9.5 \text{ nM}$) but with a high amount of nonspecific binding at the cell membrane of about 50%. In saturation expts. a K_D value of $97.2 \pm 8.5 \text{ nM}$ was found for the Alexa Fluor 532 derivative-antibody interaction. Investigation of the binding of this ligand to the benzodiazepine receptor in FCS cell measurements led to confirmation of high specific binding behavior with a K_D value of $9.9 \pm 1.9 \text{ nM}$. A nonspecific binding of <10% was observed after incubation with $1 \mu\text{M}$ of midazolam. The different properties of the labeled benzodiazepine derivs. and the requirements of the fluorophore in small dye-labeled ligands in FCS binding studies, at the membrane of living cells, are discussed.
 IT 380304-22-3 457075-12-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (dye-labeled benzodiazepines as small ligands for receptor binding studies using fluorescence correlation spectroscopy)
 RN 380304-22-3 CAPLUS
 CN Xanthylum, 9-[2-carboxy-4-[[[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-

oxohexyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (CA INDEX NAME)

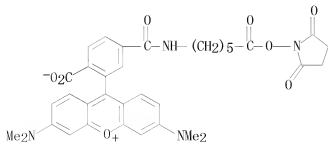
PAGE 1-A



PAGE 2-A



RN 457075-12-6 CAPLUS
CN Xanthylum, 9-[2-carboxy-5-[[[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (CA INDEX NAME)



OSC.G 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)
RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 34 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN
 AN 2004:414513 CAPLUS
 DN 140:419882
 TI Fluorescent peptide substrates for the detection of enzyme activity in biological samples
 IN Packard, Beverly S.; Komoriya, Akira
 PA Oncolmmunin, Inc., USA
 SO U.S. Pat. Appl. Publ., 114 pp., Cont.-in-part of Appl. No. PCT/US00/24882.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN, CNT 6

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | US 20040096926 | A1 | 20040520 | US 2001-874350 | 20010604 |
| | US 7312302 | B2 | 20071225 | | |
| | US 6037137 | A | 20000314 | US 1997-802981 | 19970220 |
| | WO 9837226 | A1 | 19980827 | WO 1998-US3000 | 19980220 |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW | | | | |
| | RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | US 6936687 | B1 | 20050830 | US 1999-394019 | 19990910 |
| | WO 2001018238 | A1 | 20010315 | WO 2000-US24882 | 20000911 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| PRAI | US 20080199898 | A1 | 20080821 | US 2007-941766 | 20071116 |
| | JP 2008167757 | A | 20080724 | JP 2008-21366 | 20080131 |
| | US 1997-802981 | A2 | 19970220 | | |
| | WO 1998-US3000 | A2 | 19980220 | | |
| | US 1999-394019 | A2 | 19990910 | | |
| | WO 2000-US24882 | A2 | 20000911 | | |
| | JP 1998-536778 | A3 | 19980220 | | |
| | US 2001-874350 | A3 | 20010604 | | |
| | MARPAT 140:419882 | | | | |
| | AB | | | | |

The present invention provides for novel reagents whose fluorescence increases in the presence of particular proteases. The reagents comprise a characteristically folded peptide backbone conjugated to two fluorophores such that the fluorophores are located opposite sides of a cleavage site. When the folded peptide is cleaved, as by digestion with a protease, the fluorophores provide a high intensity fluorescent signal at a visible wavelength. Because of their high specificity and their high fluorescence signal in the visible wavelengths, these protease indicators are particularly well suited for detection of protease activity in biol. samples, in particular in frozen tissue sections. In one example, the protease indicator having the formula
 F1-Asp-Ala-Ile-Pro-Nle-Ser-Ile-Pro-Cys-F2, where F1 is a donor fluorophore (5-carboxytetramethylrhodamine) linked to aspartic acid via the α -amino group and F2 is an acceptor fluorophore (rhodamine X acetamide (R492)) linked via the sulfhydryl group of the cysteine,

exhibits changes in emission spectrum after addn of an elastase protease.
Thus this invention also provides for methods of detecting protease
activity in situ in frozen sections.

IT 212207-37-9 691868-32-3 691868-33-4

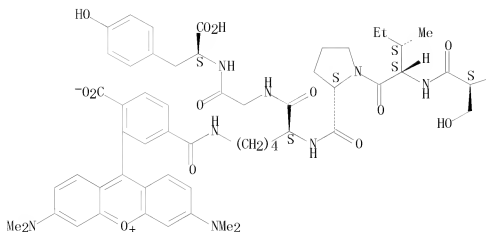
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(fluorescent peptide substrates for the detection of enzyme activity in
biol. samples)

RN 212207-37-9 CAPLUS

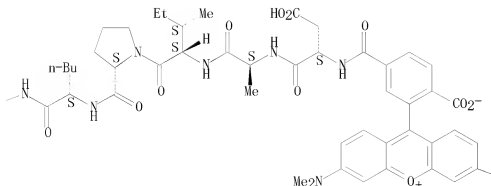
CN L-Tyrosine, N-[3-[3,6-bis(dimethylamino)xanthylium-9-yl]-4-carboxybenzoyl]-
L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-
isoleucyl-L-prolyl-N6-[3-[3,6-bis(dimethylamino)xanthylium-9-yl]-4-
carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

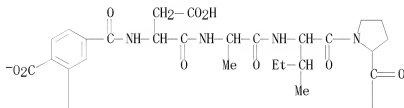
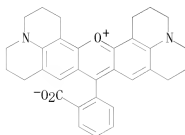


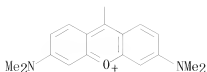
PAGE 1-C

NMe₂

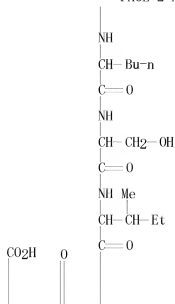
RN 691868-32-3 CAPLUS
 CN L-Cysteine, N-[3-[3, 6-bis(dimethylamino)xanthylium-9-yl]-4-carboxybenzoyl]-
 L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-
 isoleucyl-L-prolyl-S-[2-[[[3(or 4)-carboxy-4(or
 3)-(2, 3, 6, 7, 12, 13, 16, 17-octahydro-1H, 5H, 11H, 15H-xantheno[2, 3, 4-ij:5, 6, 7-
 i' j']diquinolizin-18-ium-9-yl)phenyl]amino]-2-oxoethyl]-, bis(inner salt)
 (9CI) (CA INDEX NAME)

PAGE 1-A

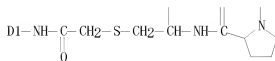




PAGE 2-A



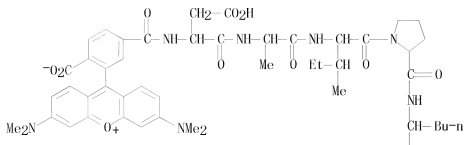
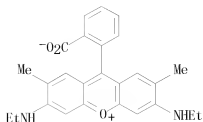
PAGE 3-A



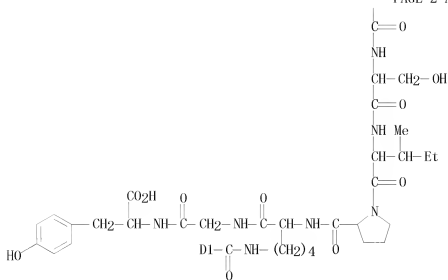
RN 691868-33-4 CAPLUS

CN L-Tyrosine, N-[3-[3, 6-bis(dimethylamino)xanthylum-9-yl]-4-carboxybenzoyl]-L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-isoleucyl-L-prolyl-N6-[3(or 4)-[3, 6-bis(ethylamino)-2, 7-dimethylxanthylum-9-yl]-4(or 3)-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
 RE.CNT 71 THERE ARE 71 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

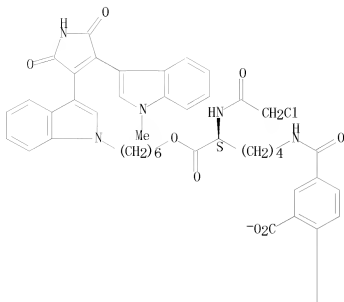
L7 ANSWER 35 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN
 AN 2004:392613 CAPLUS
 DN 140:388248
 TI Nucleotide-binding protein-directed probes and their use in determining enzyme profiles
 IN Campbell, David Alan; Szardenings, Anna Katrin; Shreder, Kevin Robert; Betancort, Juan Manuel; Winn, David

PA Activx Biosciences, Inc., USA
 SO PCT Int. Appl., 131 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN, CNT 1

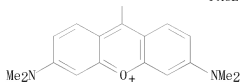
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|--|--------------|-----------------|----------|
| PI | WO 2004040003 | A2 | 20040513 | WO 2003-US34550 | 20031029 |
| | WO 2004040003 | A3 | 20041223 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| | AU 2003298608 | A1 | 20040525 | AU 2003-298608 | 20031029 |
| PRAI | US 2002-422304P | P | 20021029 | | |
| | WO 2003-US34550 | W | 20031029 | | |
| AB | The present invention provides nucleotide binding protein-directed affinity probes (NBAPs), such as derivs. of 4-phenylaminoquinazoline, staurosporine, bis-indolemaleimide, pyrido[2,3-d]pyrimidine, and adenine, and methods for their use. The NBAP generally comprises the aforementioned targeting moiety, a reactive group (thiocyanate, maleimide, etc.), and a label (fluorescein, rhodamine, etc.). The subject methods and compns. can provide enhanced simplicity and accuracy in identifying changes in the presence, amount, or activity of nucleotide binding proteins in a complex protein mixture, preferably kinases, and most preferably active forms of kinases, using NBAPs that bind to target nucleotide binding protein(s). | | | | |
| IT | 688025-02-7P | 688025-08-3P | 688025-12-9P | | |
| | RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses) (nucleotide-binding protein-directed probes and their use in determining enzyme profiles) | | | | |
| RN | 688025-02-7 | CAPLUS | | | |
| CN | Xanthylum, 9-[2-carboxy-4-[[[(5S)-5-[(2-chloroacetyl)amino]-6-[[6-[3-[2,5-dihydro-4-(1-methyl-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]hexyl]oxy]-6-oxohexyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (CA INDEX NAME) | | | | |

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

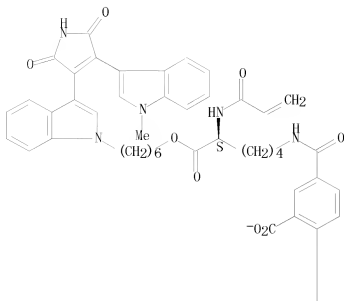


RN 688025-08-3 CAPLUS

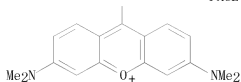
CN Xanthylum, 9-[2-carboxy-4-[[[(5S)-6-[[6-[3-[2,5-dihydro-4-(1-methyl-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]hexyl]oxy]-6-oxo-5-[(1-oxo-2-propen-1-yl)amino]hexyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



RN 688025-12-9 CAPLUS

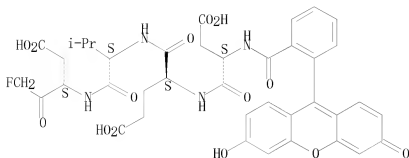
CN Xanthylum, 9-[2-carboxy-4-[[[(5S)-6-[[6-[3-[2,5-dihydro-4-(1-methyl-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]hexyl]oxy]-5-[[4-(fluorosulfonyl)benzoyl]amino]-6-oxohexyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (CA INDEX NAME)

Absolute stereochemistry.

plasma membrane permeabilization. Moreover, we developed a reliable real-time flow cytometric monitoring of $\Delta \Psi_m$ and plasma membrane integrity in response to neurotoxic insults including MPTP treatment. Taking advantage of recently developed specific fluorescent probes and a third generation pan-caspase inhibitor, this integrated approach will be pertinent to study the cell biol. of neuronal apoptosis and to characterize new neuro-toxic/protective mols.

IT 352031-65-3, FAM-DEVD-FMK
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (Fluorochrome Labeled Inhibitor of Caspase, FLICA; dynamic anal. of apoptosis in primary cortical neurons by fixed- and real-time cytofluorometry)
 RN 352031-65-3 CAPLUS
 CN L-Valinamide, N-[2-(6-hydroxy-3-oxo-3H-xanthen-9-yl)benzoyl]-L- α -aspartyl-L- α -glutamyl-N-[(1S)-1-(carboxymethyl)-3-fluoro-2-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
 RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

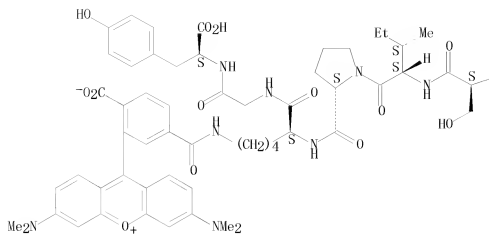
L7 ANSWER 37 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN
 AN 2003:874871 CAPLUS
 DN 139:360902
 TI Homo-doubly fluorophore-labeled peptides for the detection of enzyme activity in biological samples
 IN Packard, Beverly; Komoriya, Akira
 PA Onco Immunin, Inc., USA
 SO U.S. Pat. Appl. Publ., 42 pp., Cont.-in-part of Appl. No. PCT/US00/24882. CODEN: USXXCO
 DT Patent
 LA English
 FAX.CNT 6

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| PI US 20030207264 | A1 | 20031106 | US 2000-747287 | 20001222 |
| US 6893868 | B2 | 20050517 | | |
| US 6037137 | A | 20000314 | US 1997-802981 | 19970220 |
| US 6936687 | B1 | 20050830 | US 1999-394019 | 19990910 |
| WO 2001018238 | A1 | 20010315 | WO 2000-US24882 | 20000911 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |

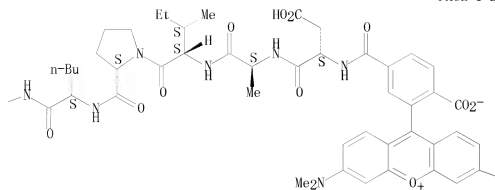
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 CA 2432973 A1 20020808 CA 2001-2432973 20011221
 WO 2002061038 A2 20020808 WO 2001-US49781 20011221
 WO 2002061038 A9 20021128
 WO 2002061038 A3 20030313
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 AU 2002249837 A1 20020812 AU 2002-249837 20011221
 EP 1356084 A2 20031029 EP 2001-998079 20011221
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 US 20050158766 A1 20050721 US 2004-15864 20041215
 US 7541143 B2 20090602
 JP 2008167757 A 20080724 JP 2008-21366 20080131
 PRAI US 1997-802981 A2 19970220
 US 1999-394019 A2 19990910
 WO 2000-US24882 A2 20000911
 JP 1998-536778 A3 19980220
 WO 1998-US3000 A2 19980220
 US 2000-747287 A 20001222
 WO 2001-US49781 W 20011221
 AB The present invention provides for novel reagents whose fluorescence changes upon cleavage or a change in conformation of a backbone. The reagents comprise a backbone (e.g. nucleic acid, polypeptide, etc.) joining two fluorophores of the same species whereby the fluorophores form an H-dimer resulting in quenching of the fluorescence of the fluorophores. One such fluorophore-labeled peptide comprises DAIP(Nle)SIPKGY, where the fluorophore is linked to the N-terminus via the α -amino group of aspartic acid and to the ϵ -amino group of lysine by the displacement of a succinimidyl group linked to 6-carboxytetramethylrhodamine (6-TMR) or 5/6-carboxy-X-rhodamine. When the backbone is cleaved or changes conformation, the fluorophores are separated, no longer forming an H-type dimer, and are de-quenched thereby providing a detectable signal. The use of a single fluorophore rather than an "acceptor-donor" fluorescence resonance energy transfer system offers synthesis and performance advantages. An addnl. discovery of this invention is that attachment of a hydrophobic protecting group to a polypeptide enhances uptake of that polypeptide by a cell. A new class of profluorescent protease substrate was designed and synthesized with spectral properties that fit the exciton model.
 IT 212207-37-9 212268-88-7 212268-91-2
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (homo-doubly fluorophore-labeled peptides for the detection of enzyme activity in biol. samples)
 RN 212207-37-9 CAPLUS
 CN L-tyrosine, N-[3-[3,6-bis(dimethylamino)xanthylium-9-yl]-4-carboxybenzoyl]-L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-isoleucyl-L-prolyl-N6-[3-[3,6-bis(dimethylamino)xanthylium-9-yl]-4-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PAGE 1-C

NMe₂

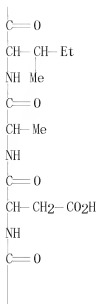
RN 212268-88-7 CAPLUS

CN L-Cysteine, N-[4-[3, 6-bis(dimethylamino)xanthylum-9-yl]-3-carboxybenzoyl]-

PAGE 2-A



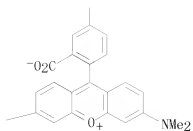
PAGE 2-B



PAGE 3-A

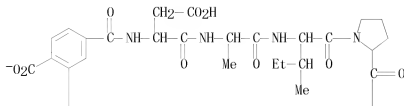
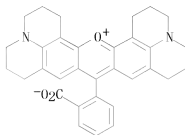


PAGE 3-B

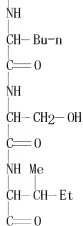
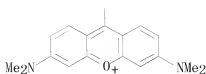


RN 212268-91-2 CAPLUS
 CN L-Tyrosine, N-[3-[3,6-bis(dimethylamino)xanthylium-9-yl]-4-carboxybenzoyl]-L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-isoleucyl-L-prolyl-N6-[3(or 4)-carboxy-4(or 3)-(2,3,6,7,12,13,16,17-octahydro-1H,5H,11H,15H-xantheno[2,3,4-ij:5,6,7-i'j']diquinolizin-18-ium-9-yl)benzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

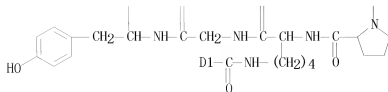
PAGE 1-A



PAGE 2-A



PAGE 3-A



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L7 ANSWER 38 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN

AN 2003:825369 CAPLUS

DN 141:3134

TI Interactions of fluorochrome-labeled caspase inhibitors with apoptotic cells: a caution in data interpretation

AU Pozarowski, P.; Huang, X.; Halicka, D. H.; Lee, B.; Johnson, G.; Darzynkiewicz, Z.

CS Brander Cancer Research Institute, New York Medical College, Valhalla, NY, USA

S0 Cytometry, Part A (2003), 55A(1), 50-60

CODEN: CPAYAV

PB Wiley-Liss, Inc.

DT Journal

LA English

AB Fluorochrome-labeled inhibitors of caspases (FLICA, e.g., FAM-VAD-FMK, FITC-VAD-FMK) have been designed as affinity labels of the enzyme active center of caspases. Their binding by apoptotic cells was interpreted as reflecting activation of caspases. We have recently observed, however, that their binding is more complex and may involve addnl. mechanisms. Our goal in this study was to clarify the ongoing utility of these probes. Apoptosis of HL-60, Jurkat, MCF-7 and T-24 cells was induced by the DNA topoisomerase I inhibitor, topotecan, or by oxidative stress (H2O2). Lymphocytes were induced by their mitogenic activation. Using multi-parameter laser scanning and flow cytometry anal., the correlation between FLICA binding and the number of known apoptotic indicators was examined. These included: collapse of the mitochondrial transmembrane potential; activation of caspase-3 (detected immunocytochem.); binding of annexin V; chromatin condensation; the presence of DNA strand breaks; and loss of plasma membrane capability to exclude propidium iodide (PI). FLICA binding specificity was tested by pretreatment with z-VAD-FMK or z-DEVD-FMK. FLICA binding was subsequent to the collapse of mitochondrial transmembrane potential, nearly concurrent with caspase-3 activation, and preceded annexin V binding, chromatin condensation, DNA fragmentation and loss of plasma membrane integrity. The predominant portion of FAM-VAD-FMK, FITC-VAD-FMK or FAM-DEVD-FMK binding to apoptotic cells could not be inhibited by z-VAD-FMK or z-DEVD-FMK, resp., when the unlabeled inhibitors were added post-induction of apoptosis. : FLICA are specific and convenient to use markers of apoptotic cells and they detect very early events of apoptosis associated with caspases activation. Assays that combine their binding with either the loss of mitochondrial potential or with exclusion of PI as a probe of plasma membrane integrity, distinguish sequential stages of apoptosis and are particularly useful to differentiate between apoptosis and necrosis. Our results conform with the published data that unlabeled caspase inhibitors, when added after induction of apoptosis, cannot prevent activation of caspases detected by binding of biotinylated inhibitors or by cleavage of fluorogenic substrates. While FLICA binding by apoptotic cells most likely is a consequence of caspase activation, these binding events may also involve

other or addnl. mechanisms than simply their specific attachment to the active enzyme centers of caspases.

IT 352031-65-3, FAM-DEVD-FMK

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);

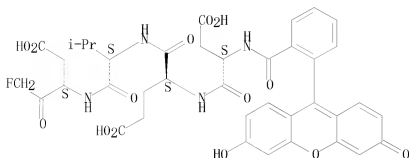
ANST (Analytical study); BIOL (Biological study); USES (Uses)

(interactions of fluorochrome-labeled caspase inhibitors with apoptotic cells)

RN 352031-65-3 CAPLUS

CN L-Valinamide, N-[2-(6-hydroxy-3-oxo-3H-xanthen-9-yl)benzoyl]-L- α -aspartyl-L- α -glutamyl-N-[(1S)-1-(carboxymethyl)-3-fluoro-2-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 30 THERE ARE 30 CAPLUS RECORDS THAT CITE THIS RECORD (30 CITINGS)

RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 39 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2003:777246 CAPLUS

DN 139:288636

TI Single molecule detection systems and methods

IN Williams, John G. K.; Bashford, Gregory R.

PA Li-Cor, Inc., USA

S0 U.S. Pat. Appl. Publ., 60 pp., Cont.-in-part of U.S. Ser. No. 876,375.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|----------|
| PI | US 20030186255 | A1 | 20031002 | US 2002-164685 | 20020605 |
| | US 7118907 | B2 | 20061010 | | |
| | US 20020039738 | A1 | 20020404 | US 2001-876375 | 20010606 |
| | US 6869764 | B2 | 20050322 | | |
| | WO 2002099406 | A2 | 20021212 | WO 2002-US18064 | 20020605 |
| | WO 2002099406 | A3 | 20030206 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| | AU 2002318334 | A1 | 20021216 | AU 2002-318334 | 20020605 |
| | PRAI US 2001-876375 | A2 | 20010606 | | |

US 2002-381864P P 20020516
 US 2000-209896P P 20000607
 US 2001-286238P P 20010424
 US 2002-146400 A 20020514
 WO 2002-US18064 W 20020605

AB A microfluidic system is provided that includes a substrate, a first microchannel disposed in the substrate for providing a reactant to a reaction zone, a second microchannel disposed in the substrate, and a third microchannel disposed in the substrate, the third microchannel providing fluid communication between the first and second microchannels. The system also typically includes first and second electrodes, positioned at opposite ends of the second microchannel, for providing an elec. field within the second microchannel. In operation, when the reactant is in the reaction zone, a reaction product is produced having a net elec. charge different from the elec. charge of the reactant.

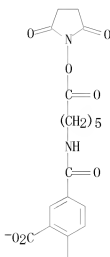
IT 380304-22-3

RL: ARU (Analytical role, unclassified); ANST (Analytical study)
 (single mol. detection systems and methods)

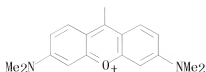
RN 380304-22-3 CAPLUS

CN Xanthylum, 9-[2-carboxy-4-[[[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



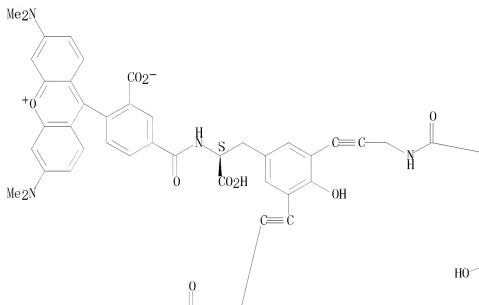
OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)
 RE.CNT 71 THERE ARE 71 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

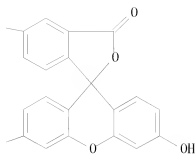
- L7 ANSWER 40 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN
 AN 2003:714438 CAPLUS
 DN 139:391807
 TI Synthesis of Novel Tyrosinyl FRET Cassettes, Terminators, and Their Potential Use in DNA Sequencing
 AU Sudhakar Rao, T.; Zhang, Weihong; Xiao, Haiguang; Flick, Parke; Kumar, Shiv; Nampalli, Satyam
 CS Amersham Biosciences, Piscataway, NJ, 08855-1327, USA
 S0 Nucleosides, Nucleotides & Nucleic Acids (2003), 22(5-8), 1443-1445
 CODEN: NNAFY; ISSN: 1525-7770
 PB Marcel Dekker, Inc.
 DT Journal
 LA English
 AB Fluorescence resonance energy transfer (FRET) dye labeled cassettes and terminators with one or more donor dyes (fluorescein) and acceptor dye (rhodamine dyes) with benzofuran or tyrosine linker moieties were synthesized. These terminators were evaluated for their energy transfer and DNA sequencing potential using thermostable DNA polymerase.
 IT 625380-77-0P 625380-78-1P
 RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (synthesis of novel tyrosine- and benzofuran-linked FRET cassettes and terminators for use in DNA sequencing)
 RN 625380-77-0 CAPLUS
 CN Xanthylum, 9-[4-[[[(1S)-2-[3,5-bis[3-[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen-5-yl)carbonyl]amino]-1-propyn-1-yl]-4-hydroxyphenyl]-1-carboxyethyl]amino]carbonyl]-2-carboxyphenyl]-3,6-bis(dimethylamino)-, inner salt (CA INDEX NAME)

Absolute stereochemistry.

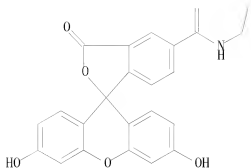
PAGE 1-A



PAGE 1-B



PAGE 2-A

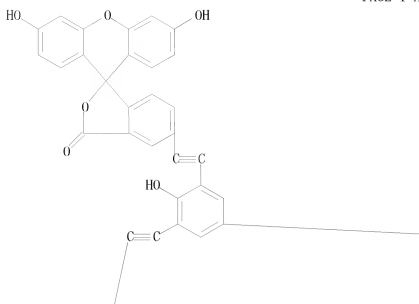


RN 625380-78-1 CAPLUS

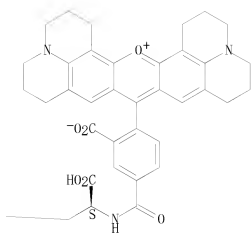
CN 1H, 5H, 11H, 15H-Xantheno[2, 3, 4-ij:5, 6, 7-i' j']diquinolizin-18-ium,
 9-[4-[[[(1S)-2-[3, 5-bis[(3', 6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H), 9'-
 [9H]xanthen]-4'-yl)ethynyl]-4-hydroxyphenyl]-1-
 carboxyethyl]amino]carbonyl]-2-carboxyphenyl]-2, 3, 6, 7, 12, 13, 16, 17-
 octahydro-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

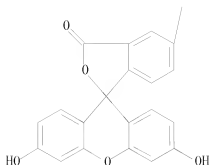
PAGE 1-A



PAGE 1-B



PAGE 2-A



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
 RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 41 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN

AN 2003:42337 CAPLUS

DN 138:91395

TI Method for increasing hydrophilicity of fluorescent label compounds, and their use

IN Meltola, Niko; Soini, Aleksi

PA Arctic Diagnostics Oy, Finland

S0 PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 2003004569 | A1 | 20030116 | WO 2002-FI581 | 20020701 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| | AU 2002321334 | A1 | 20030121 | AU 2002-321334 | 20020701 |
| | EP 1401962 | A1 | 20040331 | EP 2002-755031 | 20020701 |
| | EP 1401962 | B1 | 20060913 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | | | |
| | JP 2004533533 | T | 20041104 | JP 2003-510732 | 20020701 |
| | AT 339475 | T | 20061015 | AT 2002-755031 | 20020701 |
| | US 20040147728 | A1 | 20040729 | US 2003-482057 | 20031229 |
| | US 7198958 | B2 | 20070403 | | |
| PRAI | FI 2001-1438 | A | 20010702 | | |
| | US 2001-301831P | P | 20010702 | | |
| | WO 2002-FI581 | W | 20020701 | | |
| OS | MARPAT 138:91395 | | | | |
| AB | The invention relates to fluorescent label compds. in the form of dipyrrometheneboron difluoride dye derivs. containing NHCH(CH ₂ CH ₂ Z)CONHY or NHCH ₂ CH ₂ CH ₂ CONHY groups, wherein Z is a reactive group and Y is a water-solubilizing moiety or CH ₂ CH ₂ SO ₃ X, with X being a cation. The | | | | |

invention also relates to the use of the compds. in bioanal. assays and cytol. or histol. staining methods. The invention further relates to a method for increasing the hydrophilicity of fluorescent compds. In an example, a glutamic acid-taurine linker, HO₂CCH₂CH₂CH(NH₂)CONHCH₂CH₂SO₃H, was prepared and condensed with 4,4-difluoro-5-(2-thienyl)-1,3-dimethyl-4-bora-3a,4a-diaza-s-indacene-2-propionic acid succinimidyl ester and the product was then re-esterified with N-hydroxysuccinimide to give a fluorescent compound suitable for labeling of mouse IgG anti-AFP.

IT 485397-10-2P

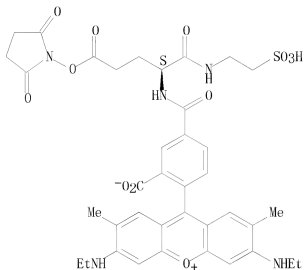
RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation); USES (Uses)

(dye; production of hydrophilic dipyrrometheneboron difluoride fluorescent biomol. labeling dyes)

RN 485397-10-2 CAPLUS

CN Xanthylum, 9-[2-carboxy-4-[[[(1S)-4-[(2,5-dioxo-1-pyrrolidinyl)oxy]-4-oxo-1-[[[2-sulfoethyl]amino]carbonyl]butyl]amino]carbonyl]phenyl]-3,6-bis(ethylamino)-2,7-dimethyl-, inner salt (CA INDEX NAME)

Absolute stereochemistry.



IT 485397-09-9P

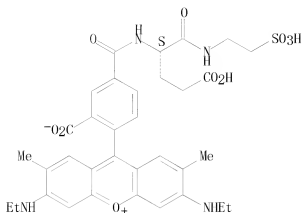
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; production of hydrophilic dipyrrometheneboron difluoride fluorescent biomol. labeling dyes)

RN 485397-09-9 CAPLUS

CN Xanthylum, 9-[2-carboxy-4-[[[(1S)-3-carboxy-1-[[[2-sulfoethyl]amino]carbonyl]propyl]amino]carbonyl]phenyl]-3,6-bis(ethylamino)-2,7-dimethyl-, inner salt (CA INDEX NAME)

Absolute stereochemistry.



OSC, G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
RE, CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 42 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2002:931744 CAPLUS
DN 137:370360
TI Preparation of fluorescence-marked cyclic peptolides with
ionophore-chromopore pairs for selective determination of potassium ion
IN Andraea, Fritz; Uray, Georg
PA Austria
SO Austrian, 7 pp.
CODEN: AUXXAK
DT Patent
LA German
FAN_CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------|------|----------|-----------------|----------|
| PI | AT 407578 | B | 20010425 | AT 1998-746 | 19980506 |
| | AT 9800746 | A | 20000815 | | |
| PRAI | AT 1998-746 | | 19980506 | | |

AB The invention consists of fluorescence-marked cyclic peptolides (depsi-peptides) and their use for optical measurement of potassium ion concentration in a sample. Binding of potassium ion to the cyclic peptolide results in a configurational change which alters one or more optical characteristics of the fluorophore label, such as its fluorescence depolarization. Thus, using smaller blocks consisting of Fmoc-L-Orn (TAMRA)-OH, Fmoc-D-Val-O-L-Lac-OH, Fmoc-L-Val-O-D-Hiv-OH, Fmoc-D-Glu (Obut)-O-L-Lac-OH, or Fmoc-L-Orn (Boc)-O-D-Hiv-OH [TAMRA = N-[9-(2-carboxy-6-[[[(2,5-dioxo-1-pyrrolydinyl)oxy]carbonyl]phenyl]-6-(dimethylamino)-3H-xanthen-3-ylidene]-N-methyl-methanaminium]chloride; Lac = lactic acid; Hiv = 2-hydroxyisovaleric acid], first a linear analog of valinomycin was synthesized using solid-phase peptide synthesis techniques. After release from the column, the linear analogs were cyclized, and, after deprotection, substituted with the desired fluorescent or chromophoric magnetic side-chains, e.g., TAMRA, fluorescein, or Bodipy, to give, e.g., c[L-Orn(5'-fluoresceinyl)-D-Hiv-D-Val-L-Lac-L-Val-D-Hiv-D-Val-L-Lac-L-Val-D-Hiv-D-Val-L-Lac-](1). I was shown to selectively isolate K⁺ in preference to Na⁺.

IT 475578-35-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and reaction of in the preparation of cyclic depsipeptides for use

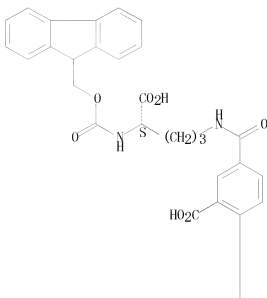
as K⁺ concentration anal. tools)

RN 475578-35-9 CAPLUS

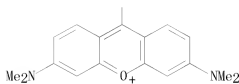
CN Xanthylum, 9-[2-carboxy-4-[[[(4S)-4-carboxy-4-[[[9H-fluoren-9-ylmethoxy]carbonyl]amino]butyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, chloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



● Cl⁻

IT 475578-28-0

RL: RCT (Reactant); RACT (Reactant or reagent)

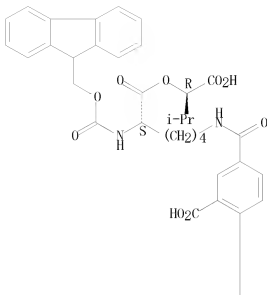
(reaction of in the preparation of cyclic depsipeptides for use as K⁺ concentration anal. tools)

RN 475578-28-0 CAPLUS

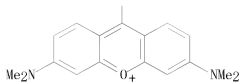
CN Xanthylum, 9-[2-carboxy-4-[[[(5S)-6-[(1R)-1-carboxy-2-methylpropoxy]-5-[[[9H-fluoren-9-ylmethoxy]carbonyl]amino]-6-oxohexyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, chloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

● Cl⁻

L7 ANSWER 43 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 2002:736225 CAPLUS
 DN 137:262960
 TI Preparation of spiro-cyclic β -amino acid derivatives as inhibitors of
 matrix metalloproteinases and TNF- α converting enzyme (TACE)
 IN Ott, Gregory R.; Chen, Xiaotao; Duan, Jingwu; Voss, Matthew E.
 PA Bristol-Myers Squibb Company, USA
 SO PCT Int. Appl., 187 pp.
 CODEN: PIXXD2

DT Patent
 LA English

FAN, CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|----------|
| PI | WO 2002074738 | A2 | 20020926 | WO 2002-US7652 | 20020312 |
| | WO 2002074738 | A3 | 20030403 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,

PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
 UA, UG, UZ, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB,
 GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA,
 GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2439539 A1 20020926 CA 2002-2439539 20020312
 AU 2002258507 A1 20021003 AU 2002-258507 20020312
 US 20030087882 A1 20030508 US 2002-96804 20020312
 US 6720329 B2 20040413
 EP 1373199 A2 20040102 EP 2002-728458 20020312
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 US 20040132693 A1 20040708 US 2003-741326 20031218
 US 6962938 B2 20051108
 PRAI US 2001-275898P P 20010315
 US 2002-96804 A3 20020312
 WO 2002-US7652 W 20020312

OS MARPAT 137:262960

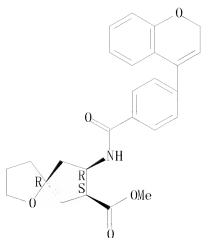
AB Novel spiro-cyclic β -amino acid derivs. C-B-NR1C0-Z-Ua-Xa-Ya-Za [C-B
 represents a spiro-cyclic ring system, where rings B and C are 3-13
 membered carbocycles or heterocycles; ring B is bonded to NR1 via
 ACR2aCR2b; A = alkanoyl, CO2H or ester, CH2CO2H, CONHOH, SH, CH2SH, etc.;
 R2a = H, alkyl, OH, alkoxy, an amino group, S(O)p (p = 0-2), etc.; R2b =
 H, alkyl; R1 = H, alkyl, Ph, PhCH2; Z is absent or is a carbocycle or
 heterocycle; Ua is absent or is O, NH, alkylimino, CO, CO2, O2C, CONH,
 S(O)p, etc.; Xa is absent or is alkylene, alkenylene, or alkynylene; Ya is
 absent or is O, NH, alkylimino, S(O)p, CO; Za = H, carbocycle, or
 heterocycle] or their pharmaceutically-acceptable salts were prepared as
 matrix metalloproteinases (MMP), TNF- α converting enzyme (TACE),
 and/or aggrecanase inhibitors. Thus,
 (7S,8R)-N-hydroxy-8-[[4-[(2-methyl-4-quinolinyl)methoxy]benzoyl]amino]-1,4-
 dioxaspiro[4.4]nonane-7-carboxamide was prepared by a multistep synthesis
 starting from (1S,2R)-1-Me cis-1,2,3,6-tetrahydropthalate. The latter
 underwent sequential esterification with benzyl alc., oxidative ring
 opening with KMnO4, and recyclization with Ac2O/NaOAc to yield
 intermediate benzyl Me (1S,2R)-4-oxo-1,2-cyclopentenedicarboxylate.

IT 461665-57-6P 461665-58-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation of spiro-cyclic β -amino acid derivs. as inhibitors of
 matrix metalloproteinases and TNF- α converting enzyme (TACE))

RN 461665-57-6 CAPLUS

CN 1-oxaspiro[4.4]nonane-7-carboxylic acid,
 8-[[4-(2H-1-benzopyran-4-yl)benzoyl]amino]-, methyl ester, (5R,7S,8R)-
 (CA INDEX NAME)

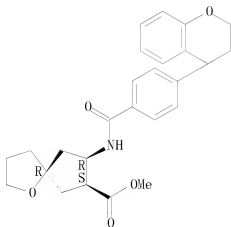
Absolute stereochemistry.



RN 461665-58-7 CAPLUS

CN 1-Oxaspiro[4.4]nonane-7-carboxylic acid,
8-[[4-(3,4-dihydro-2H-1-benzopyran-4-yl)benzoyl]amino]-, methyl ester,
(5R,7S,8R)- (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 44 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2002:695720 CAPLUS

DN 137:211908

TI Platinum compounds for nucleic acid labeling

IN Braman, Jeffrey Carl; Huang, Haoqiang

PA Stratagene, USA

S0 PCT Int. Appl., 88 pp.

CODEN: PIXXD2

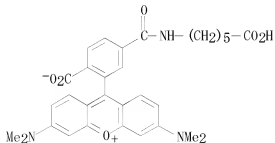
DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|----------|
| PI | WO 2002069898 | A2 | 20020912 | WO 2002-US6410 | 20020301 |

WO 2002069898 A3 20030605
W: CA
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR
US 20020165369 A1 20021107 US 2002-86515 20020301
US 6825330 B2 20041130
EP 1373572 A2 20040102 EP 2002-725061 20020301
EP 1373572 B1 20060726
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR
AT 334230 T 20060815 AT 2002-725061 20020301
EP 1705254 A2 20060927 EP 2006-75229 20020301
EP 1705254 A3 20070221
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR
PRAI US 2001-272921P P 20010302
EP 2002-725061 A3 20020301
WO 2002-US6410 W 20020301
OS MARPAT 137:211908
AB The invention relates to novel platinum-based compds. for labeling biomols. Platinum based labeling compds. according to the invention irreversibly attach to a target biomol. via coordination of a platinum (II) metal center with N or S atoms on the target biomol. The invention relates to the novel compds. themselves, methods of making the platinum-based labeling compds., probes labeled with such compds., methods of making such labeled probes, and kits comprising the novel platinum-based labeling compds. and/or probes labeled with them. The invention also relates to methods of using probes labeled with platinum-based labeling compds. of the invention, particularly array and microarray hybridization methods. Thus, platinum (Cy3-cyclohexanediamine) dinitrate was synthesized and shown to label a synthetic 73-residue oligonucleotide with 90-95% yield by reaction at 80° for 30 min using a two-fold excess of platinum labeling compound
IT 455253-07-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(platinum compds. for nucleic acid labeling)
RN 455253-07-3 CAPLUS
CN Xanthylum, 9-[2-carboxy-5-[(5-carboxypentyl)amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (CA INDEX NAME)



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 45 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN
AN 2002:594968 CAPLUS
DN 137:151788

TI Homo-doubly labeled compositions for the detection of enzyme activity in biological samples
 IN Packard, Beverly S.; Komoriya, Akira
 PA Oncoimmun, Inc., USA
 SO PCT Int. Appl., 97 pp.

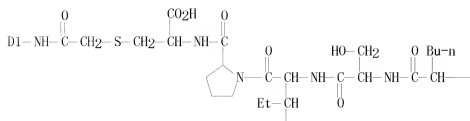
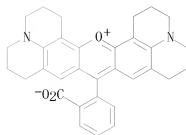
CODEN: PIXXD2

DT Patent
 LA English

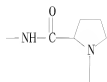
FAN, CNT 6

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|--------|----------|-----------------|----------|
| PI | WO 2002061038 | A2 | 20020808 | WO 2001-US49781 | 20011221 |
| | WO 2002061038 | A9 | 20021128 | | |
| | WO 2002061038 | A3 | 20030313 | | |
| | W: | | | | |
| | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| | RW: | | | | |
| | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| | US 20030207264 | A1 | 20031106 | US 2000-747287 | 20001222 |
| | US 6893868 | B2 | 20050517 | | |
| | CA 2432973 | A1 | 20020808 | CA 2001-2432973 | 20011221 |
| | AU 2002249837 | A1 | 20020812 | AU 2002-249837 | 20011221 |
| | EP 1356084 | A2 | 20031029 | EP 2001-998079 | 20011221 |
| | R: | | | | |
| | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| PRAI | US 2000-747287 | A | 20001222 | | |
| | US 1997-802981 | A2 | 19970220 | | |
| | US 1999-394019 | A2 | 19990910 | | |
| | WO 2000-US24882 | A2 | 20000911 | | |
| | WO 2001-US49781 | W | 20011221 | | |
| AB | The present invention provides for novel reagents whose fluorescence or absorption spectra change upon cleavage or a change in conformation of a backbone. Fluorescence or absorption spectra of these indicators change in the presence of active proteases, nucleases, glycosidases, and the like. The reagents comprise a backbone (e.g. nucleic acid, polypeptide, etc.) joining two chromophores (e.g. fluorophores) of the same species whereby the chromophores form an H-dimer resulting in quenching of the fluorescence of the fluorophores or a change in absorption spectra of the chromophores. When the backbone is cleaved or changes conformation, the chromophores are separated, no longer forming an H-type dimer, and are de-quenched thereby providing a detectable signal. The use of a single chromophore rather than an "acceptor-donor" fluorescence resonance energy transfer system offers synthesis and performance advantages. | | | | |
| IT | 212268-88-7 | | | | |
| | RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (fluorogenic protease indicator; homo-doubly labeled compns. for detection of enzyme activity in biol. samples) | | | | |
| RN | 212268-88-7 | CAPLUS | | | |
| CN | L-Cysteine, N-[4-[3,6-bis(dimethylamino)xanthylium-9-yl]-3-carboxybenzoyl]-L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-isoleucyl-L-prolyl-S-[2-[[3(or 4)-carboxy-4(or 3)-(2,3,6,7,12,13,16,17-octahydro-1H,5H,11H,15H-xantheno[2,3,4-ij:5,6,7-i']-j'-diquinolizin-18-ium-9-yl)phenyl]amino]-2-oxoethyl]-, bis(inner salt) (9CI) (CA INDEX NAME) | | | | |

PAGE 1-A



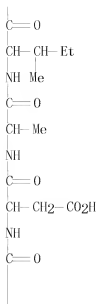
PAGE 1-B



PAGE 2-A



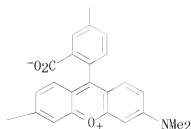
PAGE 2-B



PAGE 3-A



PAGE 3-B



IT 212207-37-9 212268-91-2
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (homo-doubly labeled compns. for detection of enzyme activity in biol.
 samples)

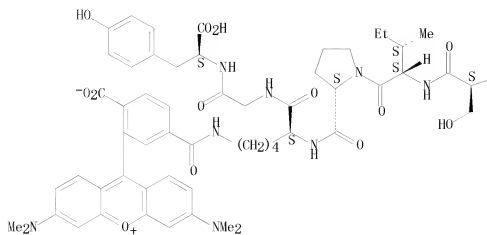
RN 212207-37-9 CAPLUS

CN L-Tyrosine, N-[3-[3,6-bis(dimethylamino)xanthylum-9-yl]-4-carboxybenzoyl]-
 L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-
 isoleucyl-L-prolyl-N6-[3-[3,6-bis(dimethylamino)xanthylum-9-yl]-4-

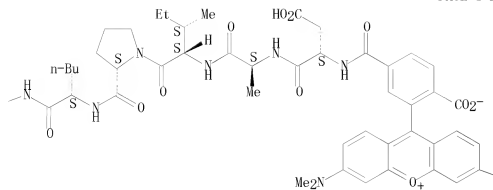
carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9C1) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

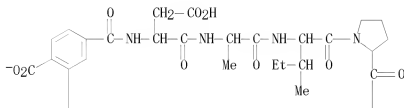
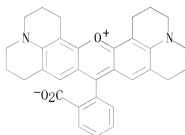


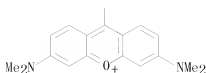
PAGE 1-C

NMe₂

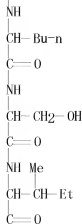
RN 212268-91-2 CAPLUS
 CN L-Tyrosine, N-[3-[3, 6-bis(dimethylamino)xanthylium-9-yl]-4-carboxybenzoyl]-
 L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-
 isoleucyl-L-prolyl-N6-[3(or 4)-carboxy-4(or
 3)-(2, 3, 6, 7, 12, 13, 16, 17-octahydro-1H, 5H, 11H, 15H-xantheno[2, 3, 4-ij:5, 6, 7-
 i' j']diquinolizin-18-ium-9-yl)benzoyl]-L-lysylglycyl-, bis(inner salt)
 (9CI) (CA INDEX NAME)

PAGE 1-A

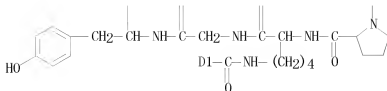




PAGE 2-A



PAGE 3-A



RE. CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 46 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2002:575271 CAPLUS
DN 137:136908
TI Methods and means for detecting enzymatic cleavage and linkage reactions
IN Lopez-Calle, Eloisa; Fries, Joachim; Jungmann, Joern
PA Evotec OAI Ag, Germany
S0 PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN. CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|----------|
| PI | WO 2002059352 | A2 | 20020801 | WO 2002-EP845 | 20020128 |
| | WO 2002059352 | A3 | 20031106 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | | |

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002246065 A1 20020806 AU 2002-246065 20020128
 EP 1385982 A2 20040204 EP 2002-714122 20020128
 EP 1385982 B1 20081022

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

AT 412062 T 20081115 AT 2002-714122 20020128
 US 20040241782 A1 20041202 US 2004-466552 20040107
 US 20070122863 A1 20070531 US 2006-432768 20060512
 US 7425425 B2 20080916

PRAI EP 2001-101869 A 20010126
 WO 2002-EP845 W 20020128
 US 2004-466552 A1 20040107

AB The invention relates to methods and means for detecting enzyme-catalyzed cleavage and linkage reactions. The invention provides modular chemical compds., which act as substrates for the enzymes concerned. The reaction products are detected using methods with a sensitivity to molar mass. Thus a Caspase 3-specific substrate was synthesized; first the substrate peptide was prepared on a solid phase and coupled to 5-carboxytetramethylrhodamine succinimide ester. The product was modified with maleimide and conjugated to a 5'-thio modified double stranded DNA.

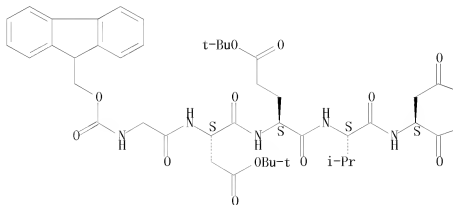
IT 444196-91-2P 444196-94-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (methods and means for detecting enzymic cleavage and linkage reactions)

RN 444196-91-2 CAPLUS

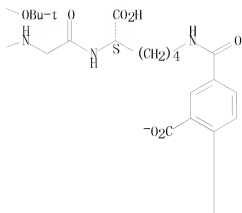
CN L-lysine, N-[(9H-fluoren-9-ylmethoxy)carbonyl]glycyl-L- α -aspartyl-L- α -glutamyl-L-valyl-L- α -aspartylglycyl-N6-[4-[3,6-bis(dimethylamino)xanthylum-9-yl]-3-carboxybenzoyl]-, 2,3,5-tris(1,1-dimethylethyl) ester, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

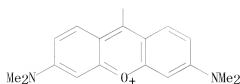
PAGE 1-A



PAGE 1-B



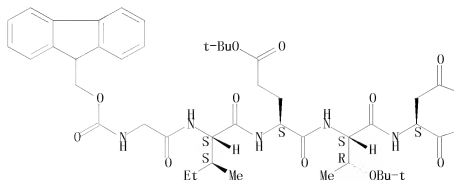
PAGE 2-B



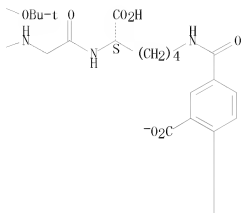
RN 444196-94-5 CAPLUS
 CN L-Lysine, N-[(9H-fluoren-9-ylmethoxy)carbonyl]glycyl-L-isoleucyl-L- α -glutamyl-O-(1,1-dimethylethyl)-L-threonyl-L- α -aspartylglycyl-N6-[4-[3,6-bis(dimethylamino)xanthylum-9-yl]-3-carboxybenzoyl]-, 3,5-bis(1,1-dimethylethyl) ester, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

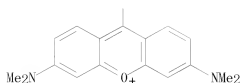
PAGE 1-A



PAGE 1-B



PAGE 2-B



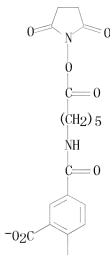
RE. CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 47 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2002:525317 CAPLUS
DN 137:223582
TI Fluorescence quenching and lifetime distributions of single molecules on glass surfaces
AU Lee, Minyung; Kim, Jiho; Tang, Jianyong; Hochstrasser, Robin M.
CS Department of Chemistry, University of Pennsylvania, Philadelphia, PA, 19104-6323, USA
S0 Chemical Physics Letters (2002), 359(5,6), 412-419
CODEN: CHPLBC; ISSN: 0009-2614
PB Elsevier Science B.V.
DT Journal
LA English
AB The fluorescence lifetimes of tetra-Me rhodamine mols., attached covalently to glass surfaces while solvated in ethylene glycol, were measured in the absence and presence of energy transfer acceptors in solution. Fluorescence quenching by either the glass surface or acceptor mols. generates nonexponential decays in bulk samples. By means of single-mol. fluorescence lifetime microscopy, the corresponding lifetime distributions are obtained and are quasi-continuous. The moments of the survival times associated with the best stretched exponential fits to the bulk data are compared with those calculated from the lifetime distributions, and the

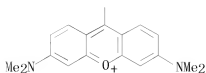
agreement is not perfect with the stretched exponential yielding a distribution that is too asym.

- IT 380304-22-3D, solid solution with 5-isomer reaction products with aminopropyldimethoxysilane and glass 457075-12-6D, solid solution with 6-isomer reaction products with aminopropyldimethoxysilane and glass
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process)
 (fluorescence quenching and lifetime distributions of single mols. on glass surfaces)
 RN 380304-22-3 CAPLUS
 CN Xanthylium, 9-[2-carboxy-4-[[[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (CA INDEX NAME)

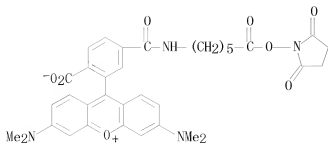
PAGE 1-A



PAGE 2-A



- RN 457075-12-6 CAPLUS
 CN Xanthylium, 9-[2-carboxy-5-[[[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (CA INDEX NAME)



OSC.G 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)
 RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 48 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN
 AN 2002:447100 CAPLUS
 DN 137:17446
 TI Rhodamine fluorophore useful as labeling reagent
 IN Quiarelo, Ronald H.; Cheon, Liu Win; Yokobata, Kathy E.
 PA Scinopharm Singapore Pte Ltd., Singapore
 S0 Jpn. Kokai Tokkyo Koho, 15 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAX.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | JP 2002168867 | A | 20020614 | JP 2000-355808 | 20001122 |
| | JP 3390161 | B2 | 20030324 | | |
| PRAI | JP 2000-355808 | | 20001122 | | |

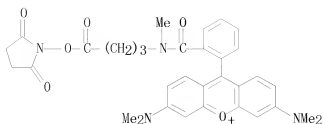
AB A Rhodamine fluorophore and its composition useful as a labeling reagent is provided, with which a substance such as amino acid, peptide, protein, nucleotide and nucleic acid is inexpensively and conveniently labeled in a stable state without lowering an efficiency. A fluorescent substance based on Rhodamine is derivatized, which forms a label-bound body capable of generating fluorescence upon irradiating light with an appropriate wavelength. A particularly preferable example is a certain single isomer of Rhodamine phosphoramidite. With these Rhodamine phosphoramidites, the efficiency in synthesizing a Rhodamine-labeled compound by a solid phase method is stimulated. In this example of label-bound body, the conversion to non-fluorescent lactam is prevented due to the possession of a sufficiently substituted amide linkage derived from 3-carboxylic acid.

IT 435304-72-6P

RL: NUU (Other use, unclassified); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (Rhodamine fluorophore useful as labeling reagent)

RN 435304-72-6 CAPLUS

CN Xanthylum, 3,6-bis(dimethylamino)-9-[2-[[[4-[(2,5-dioxo-1-pyrrolidinyl)oxy]-4-oxobutyl]methylamino]carbonyl]phenyl]- (CA INDEX NAME)



L7 ANSWER 49 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2002:156064 CAPLUS

DN 136:306357

TI Micropatterns of a cell-adhesive peptide on an amphiphilic comb polymer film

AU Hyun, Jinho; Ma, Hongwei; Banerjee, Pallab; Cole, Janet; Gonsalves, Kenneth; Chilkoti, Ashutosh

CS Department of Biomedical Engineering, Duke University, Durham, NC, 27708-0281, USA

S0 Langmuir (2002), 18 (8), 2975-2979

CODEN: LANGD5; ISSN: 0743-7463

PB American Chemical Society

DT Journal

LA English

AB We report in this paper a generic method to modify the surfaces of common polymeric biomaterials that enables spatially resolved attachment and growth of mammalian cells in a biol. relevant milieu. We demonstrate that an amphiphilic comb polymer presenting short oligoethylene glycol side chains can be coated onto a number of different polymeric biomaterials, namely polystyrene, poly(Me methacrylate), and poly(ethylene terephthalate) from a methanol/water mixture. The comb polymer film is stable in water and presents reactive COOH groups at the oligoethylene glycol chain ends, thereby permitting the surface of the comb polymer to be patterned with a cell adhesive, arg-gly-asg peptide. The micropatterned surfaces spatially confine the attachment and growth of fibroblasts for .apprx. 24 h in 10% serum to the patterned regions.

IT 410078-20-5

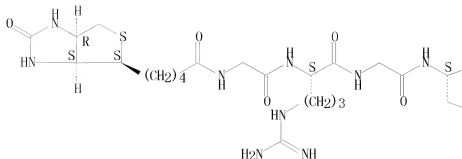
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)
(micropatterns of cell-adhesive peptide on amphiphilic comb polymer film)

RN 410078-20-5 CAPLUS

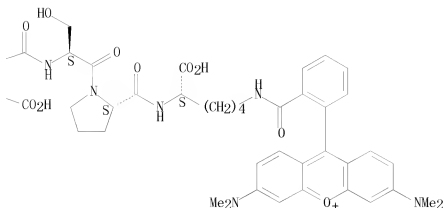
CN L-Lysine, N-[5-[(3aS, 4S, 6aR)-hexahydro-2-oxo-1H-thieno[3, 4-d]imidazol-4-yl]-1-oxopentyl]glycyl-L-arginylglycyl-L- α -aspartyl-L-seryl-L-prolyl-N6-[2-[3, 6-bis(dimethylamino)xanthylum-9-yl]benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



OSC.G 51 THERE ARE 51 CAPLUS RECORDS THAT CITE THIS RECORD (51 CITINGS)
 RE.CNT 70 THERE ARE 70 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 50 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2001:904559 CAPLUS

DN 136:32660

TI Charge-switch nucleotides for use in nucleic acid sequencing

IN Williams, John G. K.; Bashford, Gregory R.; Chen, Jiyang; Draney, Dan;
 Narayanan, Nara; Reynolds, Bambi L.; Sheaff, Pamela

PA Li-Cor, Inc., USA

SO PCT Int. Appl., 81 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------|--|----------|-----------------|----------|
| PI WO 2001094609 | A1 | 20011213 | WO 2001-US18699 | 20010607 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | |

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 20020039738 A1 20020404 US 2001-876375 20010606
US 6869764 B2 20050322
US 20020042071 A1 20020411 US 2001-876374 20010606
US 6936702 B2 20050830
CA 2412567 A1 20011213 CA 2001-2412567 20010607
EP 1287154 A1 20030305 EP 2001-946213 20010607

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2004516810 T 20040610 JP 2002-502149 20010607
US 20020168678 A1 20021114 US 2002-146400 20020514
WO 2002099406 A2 20021212 WO 2002-US18064 20020605
WO 2002099406 A3 20030206

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002318334 A1 20021216 AU 2002-318334 20020605
US 20060063173 A1 20060323 US 2005-154419 20050615
US 20080153095 A1 20080626 US 2007-925722 20071026
US 20080206764 A1 20080828 US 2007-925724 20071026

PRAI US 2000-209896P P 20000607
US 2001-286238P P 20010424
US 2001-876374 A 20010606
US 2001-876375 A 20010606
WO 2001-US18699 W 20010607
US 2002-146400 A 20020514
WO 2002-US18064 W 20020605
US 2005-154419 A1 20050615

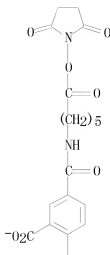
AB The present invention provides compds., methods and systems for sequencing nucleic acid using single mol. detection. Using labeled nucleoside triphosphates that exhibit charge-switching behavior, single-mol. DNA sequencing in a microchannel sorting system is realized. In operation, sequencing products are detected enabling real-time sequencing as successive detectable moieties flow through a detection channel. By elec. sorting charged mols., the cleaved product mols. are detected in isolation without interference from unincorporated nucleoside triphosphate derivs. and without illuminating the polymerase-DNA complex. Thus, a method for determining the charge on a charge-switch nucleotide of the invention is described. A charge-switch nucleotide comprising TTP conjugated via a doubly pos. charged linker to TAMRA was synthesized and used in a microchannel device in DNA sequencing.

IT 380304-22-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(charge-switch nucleotides for use in nucleic acid sequencing)

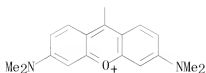
RN 380304-22-3 CAPLUS

CN Xanthylum, 9-[2-carboxy-4-[[[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



OSC.G 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (26 CITINGS)
 RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 DN 136:163154 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 51 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2001:878313 CAPLUS

DN 136:163154

TI Didehydrogeranylgeranyl ($\Delta\Delta\text{G}$): A fluorescent probe for protein prenylation

AU Liu, Xiao-hui; Prestwich, Glenn D.

CS Department of Medicinal Chemistry and the Center for Cell Signaling, The University of Utah, Salt Lake City, UT, 84112-5820, USA

S0 Journal of the American Chemical Society (2002), 124(1), 20-21

CODEN: JACSAT; ISSN: 0002-7863

PB American Chemical Society

DT Journal

LA English

AB The first intrinsically fluorescent analog of geranylgeraniol, (2E, 6E, 8E, 10E, 12E, 14E)-geranylgeraniol (all-trans- $\Delta\Delta\text{GGOH}$) has been synthesized stereoselectively and shown to substitute for the geranylgeranyl (GG) moiety in prenyltransferase reactions and in protein-ligand binding assays. All-trans- $\Delta\Delta\text{GGOH}$ showed blue fluorescence in methanol, with $\lambda_{\text{ex}} = 310 \text{ nm}$ and $\lambda_{\text{em}} = 410 \text{ nm}$ ($\epsilon_{310} = 2.4 \times 10^4 \text{ M}^{-1} \text{ cm}^{-1}$), but was only weakly fluorescent in aqueous solution. The prenyltransferase efficiency for the diphosphate analog

Δ AGGPP as a substrate for yeast protein geranylgeranyltransferase (PGGTase-1) was 60% relative to that for GGPP. The binding of Δ AGG-AcCysMe to the recombinant Rho GTPase dissociation inhibitor (RhoGDI) had a K_D of 15.1 μ M, 6-fold lower than the affinity of GG-AcCysMe. Thus, the Δ AGG moiety is a novel fluorophore suitable for studying the interaction and subcellular localization of prenylated small GTPase proteins in signaling complexes.

IT 257299-66-4P

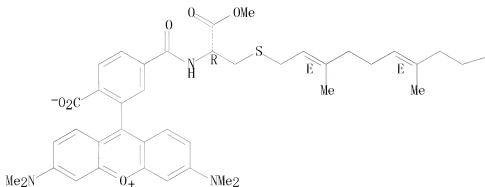
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(RhoGDI ligand; preparation and protein geranylgeranyltransferase substrate and Rho GTPase dissociation inhibitor RhoGDI ligand activity of didehydrogeranylgeranyl fluorescent probes)

RN 257299-66-4 CAPLUS

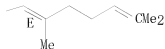
CN Xanthylum, 9-[2-carboxy-5-[[[(1R)-2-methoxy-2-oxo-1-[[[(2E, 6E, 10E)-3, 7, 11, 15-tetramethyl-2, 6, 10, 14-hexadecatetraen-1-yl]thio]methyl]ethyl]amino]carbonyl]phenyl]-3, 6-bis(dimethylamino)-, inner salt (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



PAGE 1-B



OSC.G 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)
RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 52 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

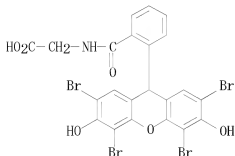
AN 2001:831676 CAPLUS

DN 136:263370

TI Synthesis and monitored selection of nucleotide surrogates for binding T:A base pairs in homopurine-homopyrimidine DNA triple helices

AU Mokhir, Andriy A.; Connors, William H.; Richert, Clemens

CS Department of Chemistry, University of Constance, Konstanz, D-78457,
Germany
S0 Nucleic Acids Research (2001), 29(17), 3674-3684
CODEN: NARHAD; ISSN: 0305-1048
PB Oxford University Press
DT Journal
LA English
OS CASREACT 136:263370
AB A total of 16 oligodeoxyribonucleotides of general sequence
5'-TCTTCTZCTTCT-3', where Z denotes an N-acyl-N-(2-hydroxyethyl)glycine
residue, were prepared via solid phase synthesis. The ability of these
oligonucleotides to form triplexes with the duplex
5'-AGAAGATAGAAGA-HEG-TCTTCTATCTTCT-3', where HEG is a hexaethylene
glycol linker, was tested. In these triplexes, an 'interrupting' T:A base
pair faces the Z residue in the third strand. Among the acyl moieties of
Z tested, an anthraquinone carboxylic acid residue linked via a glycyl
group gave the most stable triplex, whose UV m.p. was 8.4 °. Higher
than that of the triplex with 5'-TCTTCTGTCTTCT-3' as the third strand.
The results from exploratory nuclease selection expts. suggest that a
combinatorial search for strands capable of recognizing mixed sequences by
triple helix formation is feasible.
IT 403483-08-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis and monitored selection of nucleotide surrogates for binding
T:A base pairs in homopurine-homopyrimidine DNA triple helices)
RN 403483-08-9 CAPLUS
CN Glycine, N-[2-(2, 4, 5, 7-tetrabromo-3, 6-dihydroxy-9H-xanthen-9-yl)benzoyl]-
(CA INDEX NAME)



OSC.G 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)
RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 53 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN
AN 2001:785268 CAPLUS
DN 137:30106
TI Validation of flow cytometric competitive binding protocols and
characterization of fluorescently labeled ligands
AU Waller, Anna; Pipkorn, David; Sutton, Karyn L.; Linderman, Jennifer J.;
Omann, Geneva M.
CS Department of Chemical Engineering, University of Michigan, Ann Arbor, MI,
USA
S0 Cytometry (2001), 45(2), 102-114
CODEN: CYTODQ; ISSN: 0196-4763
PB Wiley-Liss, Inc.
DT Journal
LA English

AB Fluorescently labeled ligands and flow cytometric methods allow quantification of receptor-ligand binding. Such methods require calibration of the fluorescence of bound ligands. Moreover, binding of unlabeled ligands can be calculated based on their abilities to compete with a labeled ligand. In this study, calibration parameters were determined for six fluorescently labeled N-formyl peptides that bind to receptors on neutrophils. Two of these ligands were then used to develop and validate competitive binding protocols for determining binding consts. of unlabeled ligands. Spectrofluorometric and flow cytometric methods for converting relative flow cytometric intensities to number of bound ligand/cell were extended to include peptides labeled with fluorescein, Bodipy, and tetramethylrhodamine. The validity of flow cytometric competitive binding protocols was tested using two ligands with different fluorescent properties that allowed determination of rate consts. both directly and competitively for one ligand, CHO-NLFYK-tetramethylrhodamine. Calibration parameters were determined for six fluorescently-labeled N-formyl peptides. Equilibrium dissociation consts. for these ligands varied over two orders of magnitude and depended upon the peptide sequence and the mol. structure of the fluorescent tag. Kinetic rate consts. for CHO-NLFYK-tetramethylrhodamine determined directly or in competition with CHO-NLFYK-fluorescein were statistically identical. Combination of spectrofluorometric and flow cytometric methods allows convenient calcn. of calibration parameters for a series of fluorescent ligands that bind to the same receptor site. Competitive binding protocols have been independently validated.

IT 438052-63-2

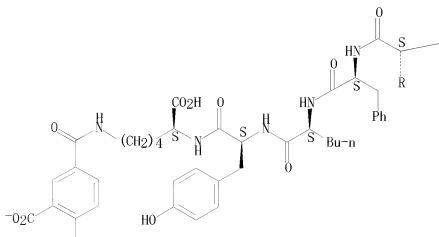
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(validation of flow cytometric competitive binding protocols and characterization of fluorescently labeled ligands)

RN 438052-63-2 CAPLUS

CN L-Lysine, N-formyl-L-norleucyl-L-leucyl-L-phenylalanyl-L-norleucyl-L-tyrosyl-N6-[4-[3, 6-bis(dimethylamino)xanthylum-9-yl]-3-carboxybenzoyl]-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

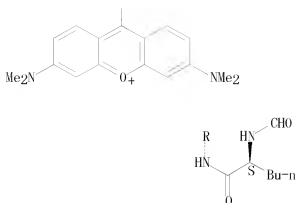
PAGE 1-A



PAGE 1-B

—Bu-i

PAGE 2-A



OSC.G 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)
 RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 54 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 2001:674879 CAPLUS
 DN 136:66474
 TI Fluorescence resonance energy transfer dye nucleotide terminators: a new
 AU Nampalli, Satyam; Khot, Mahesh; Nelson, John R.; Flick, Parke K.; Fuller,
 CS Amersham Pharmacia Biotech, Piscataway, NJ, 08855, USA
 S0 Nucleosides, Nucleotides & Nucleic Acids (2001), 20(4-7), 361-367
 CODEN: NNAFY; ISSN: 1525-7770
 PB Marcel Dekker, Inc.
 DT Journal
 LA English
 AB Fluorescence resonance energy transfer (FRET) based dye-nucleotide
 terminators were designed, synthesized, and formulated with Thermo
 Sequenase II DNA polymerase into a robust kit for high throughput DNA
 sequencing. The key energy transfer (ET) rigid and linear linker,
 required for the syntheses of energy transfer cassettes was synthesized
 via Heck coupling reaction on t-Boc-L-4-iodo-phenylalanine with
 N-TFA-propargylamine.
 IT 260397-87-3P 383372-69-8P 383372-72-3P
 383372-75-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (fluorescence resonance energy transfer dye nucleotide terminators
 approach for high-throughout DNA sequencing)
 RN 260397-87-3 CAPLUS

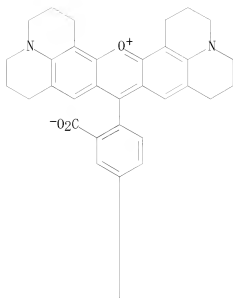
CN 1H, 5H, 11H, 15H-Xantheno[2, 3, 4-ij:5, 6, 7-i'j']diquinolizin-18-ium,
 9-[2-carboxy-4-[[[(1S)-1-carboxy-2-[4-[3-[[[(3', 6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H), 9'-[9H]xanthen]-5-yl)carbonyl]amino]-1-propynyl]phenyl]ethyl]amino]carbonyl]phenyl]-2, 3, 6, 7, 12, 13, 16, 17-octahydro-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

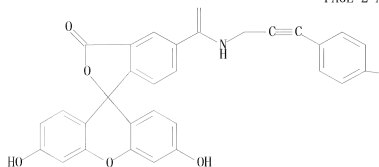
PAGE 1-A

O
||

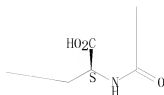
PAGE 1-B



PAGE 2-A



PAGE 2-B

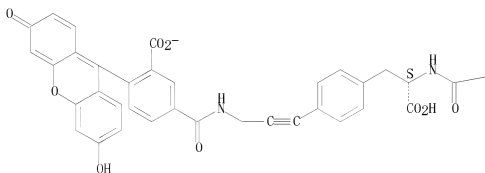


RN 383372-69-8 CAPLUS

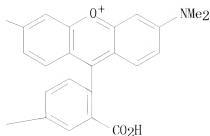
CN Xanthylum, 9-[2-carboxy-4-[[[(1S)-1-carboxy-2-[4-[3-[[3-carboxy-4-(6-hydroxy-3-oxo-3H-xanthen-9-yl)benzoyl]amino]-1-propyn-1-yl]phenyl]ethyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

Me₂N

PAGE 1-B



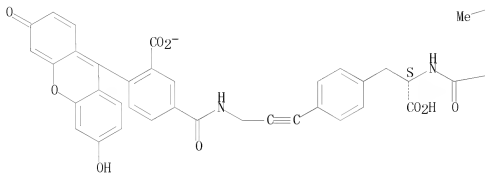
RN 383372-72-3 CAPLUS

CN Xanthylum, 9-[2-carboxy-4-[[[(1S)-1-carboxy-2-[4-[3-[[3-carboxy-4-(6-hydroxy-3-oxo-3H-xanthen-9-yl)benzoyl]amino]-1-propyn-1-yl]phenyl]ethyl]amino]carbonyl]phenyl]-3,6-bis(ethylamino)-2,7-dimethyl-, inner salt (CA INDEX NAME)

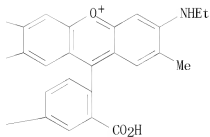
Absolute stereochemistry.

PAGE 1-A

EtNH



PAGE 1-B

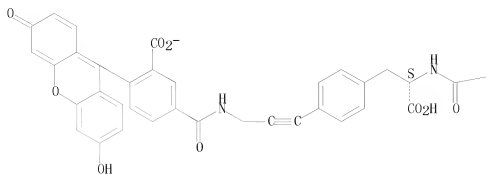


RN 383372-75-6 CAPLUS

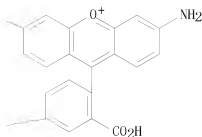
CN Xanthylum, 3,6-diamino-9-[2-carboxy-4-[[[(1S)-1-carboxy-2-[4-[3-[[3-carboxy-4-(6-hydroxy-3-oxo-3H-xanthen-9-yl)benzoyl]amino]-1-propyn-1-yl]phenyl]ethyl]amino]carbonyl]phenyl]-, inner salt (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

H₂N

PAGE 1-B



OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
 RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 55 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2001:530355 CAPLUS

DN 135:223594

TI Fluorescence spectra of some Nα-(rhodaminyl B)-L-amino acids

AU Janmey, P. A.; Vegners, R.; Rosenthal, G.; Maurops, G.; Lipsbergs, I.

CS Inst. for Med. and Eng., Univ. of Pennsylvania, PA, USA

S0 Latvijas Kimijas Zurnals (2001), (1), 53-58

CODEN: LKZUE8; ISSN: 0868-8249

PB Izdevnieciba "Zinatne"

DT Journal

LA English

AB The authors show that the fluorescence properties of the rhodaminyl amino acids depend strongly on the amino acid to which the rh-group is linked. Thus, histidine and phenylalanine residues cause serious fade of fluorescence. Valine makes solvent dependence of the fluorescence intensity pronounced but lysine increase the pH-induced emission maximum shift to longer wavelengths.

IT 358732-23-7 358732-24-8 358732-25-9

358732-26-0 358732-27-1 358732-28-2

358732-29-3 358732-30-6

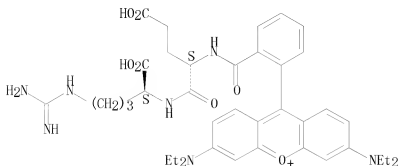
RL: ANT (Analyte); ANST (Analytical study)

(fluorescence spectra of $N\alpha$ -(rhodaminy1 B)-L-amino acids)

RN 358732-23-7 CAPLUS

CN L-Arginine, N-[2-[3, 6-bis(diethylamino)xanthylium-9-yl]benzoyl]-L- α -glutamyl-, chloride (9Cl) (CA INDEX NAME)

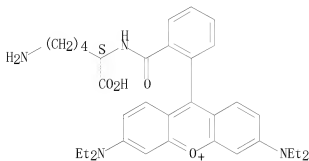
Absolute stereochemistry.

● Cl⁻

RN 358732-24-8 CAPLUS

CN Xanthylium, 9-[2-[[[(1S)-5-amino-1-carboxypentyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)

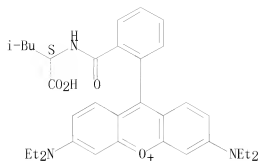
Absolute stereochemistry.

● Cl⁻

RN 358732-25-9 CAPLUS

CN Xanthylium, 9-[2-[[[(1S)-1-carboxy-3-methylbutyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)

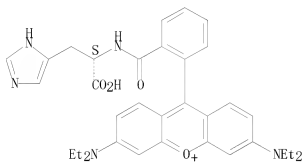
Absolute stereochemistry.



● Cl⁻

RN 358732-26-0 CAPLUS
 CN Xanthylum, 9-[2-[[[(1S)-1-carboxy-2-(1H-imidazol-5-yl)ethyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1)
 (CA INDEX NAME)

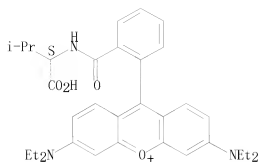
Absolute stereochemistry.



● Cl⁻

RN 358732-27-1 CAPLUS
 CN Xanthylum, 9-[2-[[[(1S)-1-carboxy-2-methylpropyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

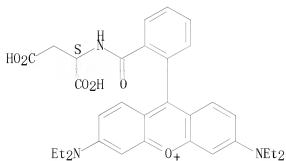


● Cl⁻

RN 358732-28-2 CAPLUS

CN Xanthylum, 9-[2-[[[(1S)-1,2-dicarboxyethyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

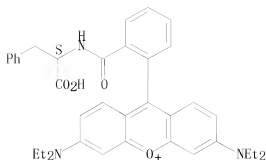


● Cl⁻

RN 358732-29-3 CAPLUS

CN Xanthylum, 9-[2-[[[(1S)-1-carboxy-2-phenylethyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)

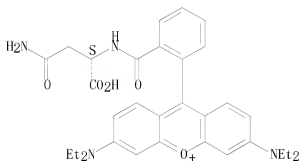
Absolute stereochemistry.



● Cl⁻

RN 358732-30-6 CAPLUS
 CN Xanthylum, 9-[2-[[[(1S)-3-amino-1-carboxy-3-oxopropyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1)
 (CA INDEX NAME)

Absolute stereochemistry.



● Cl⁻

RE, CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 56 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 2001:388480 CAPLUS
 DN 135:133818
 TI Detection of caspases activation by fluorochrome-labeled inhibitors:
 multiparameter analysis by laser scanning cytometry
 AU Smolewski, Piotr; Bedner, Elzbieta; Du, Litong; Hsieh, Tze-Chen; Wu,
 Joseph M.; Phelps, David J.; Darzynkiewicz, Zbigniew
 CS New York Medical College, Brander Cancer Research Institute, Valhalla, NY,
 10532, USA
 S0 Cytometry (2001), 44(1), 73-82
 CODEN: CYTODQ; ISSN: 0196-4763
 PB Wiley-Liss, Inc.
 DT Journal
 LA English
 AB Background: The fluorochrome-labeled inhibitors of caspases (FLICA) were
 recently used as markers of activation of these enzymes in live cells

during apoptosis (Bedner et al.: Exp Cell Res 259:308-313, 2000). The aims of this study were to (a) explore if FLICA can be used to study intracellular localization of caspases; (b) combine the detection of caspase activation with anal. of the changes with cell morphol. detected by microscopy and laser scanning cytometry (LSC); and (c) adapt the assay to fixed cells that would enable correlation, by multiparameter anal., of caspase activation with the cell attributes that require cell permeabilization in order to be measured. Methods: Apoptosis of human MCF-7, U-937, or HL-60 cells was induced by camptothecin (CPT) or tumor necrosis factor- α (TNF- α) combined with cycloheximide (CHX). Binding of FLICA to apoptotic vs. nonapoptotic cells was studied in live cells as well as following their fixation and counterstaining of DNA. Intensity of cell labeling with FLICA and DNA-specific fluorochromes was measured by LSC. Results: Exposure of live cells to FLICA led to selective labeling of cells that had morphol. changes characteristic of apoptosis. The FLICA labeling withstood cell fixation and permeabilization, which made it possible to stain DNA and measure its content for identification of the cell cycle position of labeled cells. When fixed cells were treated with FLICA, both apoptotic and nonapoptotic cells became strongly labeled and the labeling pattern was consistent with the localization of caspases as reported in the literature. A translocation of the FLICA binding targets from mitochondria to cytosol was seen in the MCF-7 cells treated with CPT. FLICA binding was largely (>90%) prevented by the substrates of the caspases or by the unlabeled caspase inhibitors having the same peptide moiety as the resp. FLICA. Conclusions: The detection of caspase activation combined with cell permeabilization requires exposure of live cells to FLICA followed by their fixation. Cell reactivity with the resp. FLICA, under these conditions, identifies the activated caspases and makes it possible to correlate their activation with the cell cycle position and other cell attributes that can be measured only after cell fixation/permeabilization. FLICA can also be used to study intracellular localization of caspases, including their translocation.

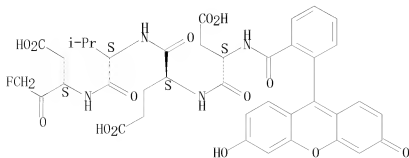
IT 352031-65-3

RL: ARU (Analytical role, unclassified); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PROC (Process)
(detection of caspases activation by fluorochrome-labeled inhibitors and multiparameter anal. by laser scanning cytometry)

RN 352031-65-3 CAPLUS

CN L-Valinamide, N-[2-(6-hydroxy-3-oxo-3H-xanthen-9-yl)benzoyl]-L- α -aspartyl-L- α -glutamyl-N-[(1S)-1-(carboxymethyl)-3-fluoro-2-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 65 THERE ARE 65 CAPLUS RECORDS THAT CITE THIS RECORD (65 CITINGS)
RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

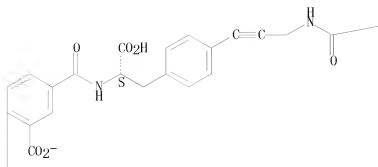
L7 ANSWER 57 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN
 AN 2001:208289 CAPLUS
 DN 134:247912
 TI Charge-modified nucleotide terminators and their use in sequencing and virus inhibition
 IN Kumar, Shiv; Flick, Parke; Nelson, John; Finn, Patrick; Nampalli, Satayam; Bull, Matthew
 PA Amersham Pharmacia Biotech, Inc., USA
 SO PCT Int. Appl., 70 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN, CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|--------------|--------------|-----------------|----------|
| PI | WO 2001019841 | A1 | 20010322 | WO 2000-US25433 | 20000916 |
| | W: | | | | |
| | AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW | | | | |
| | RW: | | | | |
| | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | CA 2382063 | A1 | 20010322 | CA 2000-2382063 | 20000916 |
| | AU 2000074941 | A | 20010417 | AU 2000-74941 | 20000916 |
| | EP 1214332 | A1 | 20020619 | EP 2000-963540 | 20000916 |
| | R: | | | | |
| | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | | | |
| PRAI | US 1999-154739P | P | 19990917 | | |
| | WO 2000-US25433 | W | 20000916 | | |
| AB | Charge-modified nucleic acid terminators comprising Z-X-S-B-L (I; Z = mono-, di-, triphosphate, thiophosphate, boranophosphate; X = 0, CH ₂ , S, NH; S = sugar, sugar analog; B = naturally occurring or synthetic base; L = alkyl, alkenyl, alkynyl optionally substituted with reporter moiety; Z, B, S, X, or Z are substituted with a moiety which imparts a net neg. charge or a net pos. charge to structure I at physiol. or nucleic acid sequencing conditions) are disclosed. A method of sequencing nucleic acids using the above charge-modified terminators, as well as a method of inhibiting a virus which comprises contacting a cell infected with a virus with a virus-inhibiting amount of the above charge-modified terminator are also disclosed. Thus, many I compds. in which Z = triphosphate, X = 0, S = 2',3'-dideoxyribose, and B = A, C, T, or U (i.e., ddNTPs) were prepared and employed in DNA sequencing reactions. Because of the charge on the ddNTP derivs., thermal breakdown products of these compds. were separated from the sequencing ladder, thereby facilitating reading of the sequencing data. | | | | |
| IT | 328252-39-7P | 328252-40-0P | 328252-42-2P | | |
| | RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) | | | | |
| | (charge-modified nucleotide terminators and their use in sequencing and virus inhibition) | | | | |
| RN | 328252-39-7 | CAPLUS | | | |
| CN | Xanthylum, 3,6-diamino-9-[2-carboxy-4-[[[(1S)-1-carboxy-2-[4-[3-[[[(3',6'-dihydroxy-3-oxo-4',5'-disulfospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-5-yl)carbonyl]amino]-1-propyn-1-yl]phenyl]ethyl]amino]carbonyl]phenyl]-, inner salt (CA INDEX NAME) | | | | |

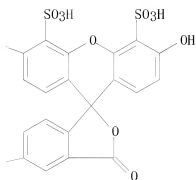
Absolute stereochemistry.

PAGE 1-A

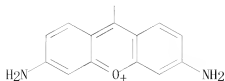
HO



PAGE 1-B



PAGE 2-A



RN 328252-40-0 CAPLUS

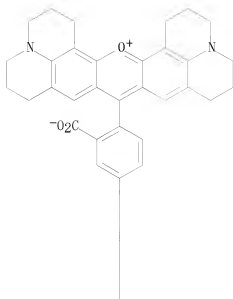
CN 1H, 5H, 11H, 15H-Xantheno[2, 3, 4-ij:5, 6, 7-i' j']diquinolizin-18-ium,
9-[2-carboxy-4-[[[(1S)-1-carboxy-2-[4-[3-[[[(3', 6'-dihydroxy-3-oxo-4', 5'-
disulfospiro[isobenzofuran-1(3H), 9'-[9H]xanthen]-5-yl) carbonyl]amino]-1-
propynyl]phenyl]ethyl]amino]carbonyl]phenyl]-2, 3, 6, 7, 12, 13, 16, 17-octahydro-
, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

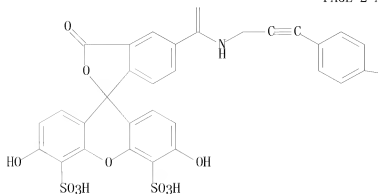
PAGE 1-A



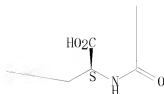
PAGE 1-B



PAGE 2-A



PAGE 2-B



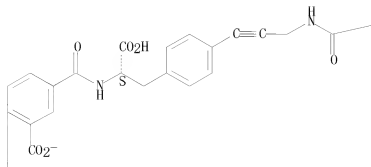
RN 328252-42-2 CAPLUS

CN Xanthylum, 9-[2-carboxy-4-[[[(1S)-1-carboxy-2-[4-[3-[(3',6'-dihydroxy-3-oxo-4',5'-disulfospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]amino]-1-propyn-1-yl]phenyl]ethyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (CA INDEX NAME)

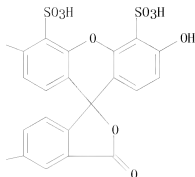
Absolute stereochemistry.

PAGE 1-A

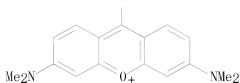
HO



PAGE 1-B



PAGE 2-A



OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
 RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

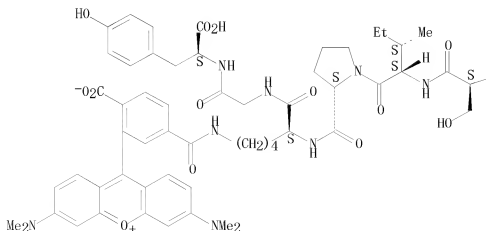
L7 ANSWER 58 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 2001:185948 CAPLUS
 DN 134:248826
 TI Fluorogenic peptides for the detection of protease activity in biological
 samples and methods of their use
 IN Komoriya, Akira; Packard, Beverly S.
 PA Oncoimmun, Inc., USA
 SO PCT Int. Appl., 86 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 6

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| PI WO 2001018238 | A1 | 20010315 | WO 2000-US24882 | 20000911 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 6936687 | B1 | 20050830 | US 1999-394019 | 19990910 |
| CA 2384021 | A1 | 20010315 | CA 2000-2384021 | 20000911 |
| EP 1214445 | A1 | 20020619 | EP 2000-961782 | 20000911 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | | | |

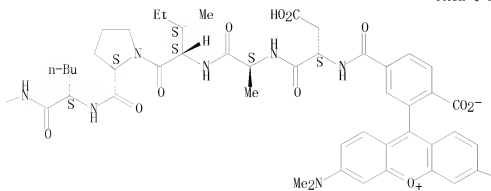
| | | | | | |
|------|---|--------|-------------|----------------|----------|
| | JP 2003508080 | T | 20030304 | JP 2001-521773 | 20000911 |
| | US 20030207264 | A1 | 20031106 | US 2000-747287 | 20001222 |
| | US 6893868 | B2 | 20050517 | | |
| | US 20040096926 | A1 | 20040520 | US 2001-874350 | 20010604 |
| | US 7312302 | B2 | 20071225 | | |
| | US 20050158766 | A1 | 20050721 | US 2004-15864 | 20041215 |
| | US 7541143 | B2 | 20090602 | | |
| | US 20080199898 | A1 | 20080821 | US 2007-941766 | 20071116 |
| PRAI | US 1999-394019 | A | 19990910 | | |
| | US 1997-802981 | A2 | 19970220 | | |
| | WO 1998-US3000 | A2 | 19980220 | | |
| | WO 2000-US24882 | W | 20000911 | | |
| | US 2000-747287 | A3 | 20001222 | | |
| | US 2001-874350 | A3 | 20010604 | | |
| OS | MARPAT 134:248826 | | | | |
| AB | The present invention provides for novel reagents whose fluorescence increases in the presence of particular proteases. The reagents comprise a characteristically folded peptide backbone conjugated to two fluorophores such that the fluorophores are located opposite sides of a cleavage site. When the folded peptide is cleaved, as by digestion with a protease, the fluorophores provide a high intensity fluorescent signal at a visible wavelength. Because of their high fluorescence signal in the visible wavelengths, these protease indicators are particularly well suited for detection of protease activity in biol. samples, in particular in frozen tissue sections. Thus, this invention also provides for methods of detecting protease activity in situ in frozen sections. | | | | |
| IT | 212207-37-9, 6-TMR-NorFes-6-TMR | | 212268-88-7 | | |
| | 212268-91-2 | | | | |
| | RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses) | | | | |
| | (fluorogenic peptides for the detection of protease activity in biol. samples and methods of their use) | | | | |
| RN | 212207-37-9 | CAPLUS | | | |
| CN | L-Tyrosine, N-[3-[3,6-bis(dimethylamino)xanthylium-9-yl]-4-carboxybenzoyl]-L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-isoleucyl-L-prolyl-N6-[3-[3,6-bis(dimethylamino)xanthylium-9-yl]-4-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME) | | | | |

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

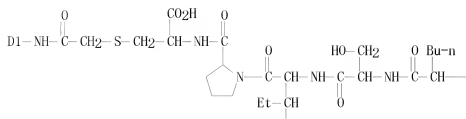
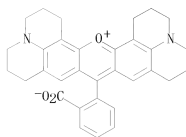


PAGE 1-C

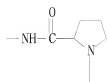
NMe2

RN 212268-88-7 CAPLUS
 CN L-Cysteine, N-[4-[3, 6-bis(dimethylamino)xanthylum-9-yl]-3-carboxybenzoyl]-
 L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-
 isoleucyl-L-prolyl-S-[2-[[[3(or 4)-carboxy-4(or
 3)-(2, 3, 6, 7, 12, 13, 16, 17-octahydro-1H, 5H, 11H, 15H-xantheno[2, 3, 4-ij:5, 6, 7-
 i' j']diquinolizin-18-ium-9-yl)phenyl]amino]-2-oxoethyl]-, bis(inner salt)
 (9CI) (CA INDEX NAME)

PAGE 1-A



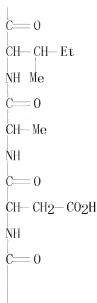
PAGE 1-B



PAGE 2-A



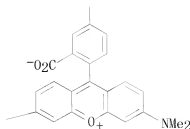
PAGE 2-B



PAGE 3-A

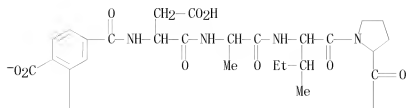
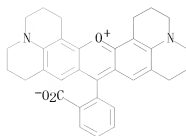


PAGE 3-B

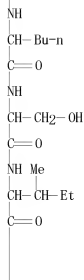
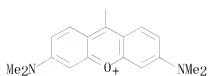


RN 212268-91-2 CAPLUS
 CN L-Tyrosine, N-[3-[3, 6-bis(dimethylamino)xanthylum-9-yl]-4-carboxybenzoyl]-
 L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-
 isoleucyl-L-prolyl-N6-[3(or 4)-carboxy-4(or
 3)-(2, 3, 6, 7, 12, 13, 16, 17-octahydro-1H, 5H, 11H, 15H-xantheno[2, 3, 4-ij:5, 6, 7-
 i' j']diquinolizin-18-ium-9-yl)benzoyl]-L-lysylglycyl-, bis(inner salt)
 (9CI) (CA INDEX NAME)

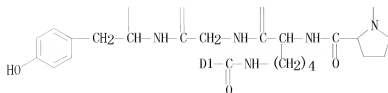
PAGE 1-A



PAGE 2-A



PAGE 3-A



OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
 RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 59 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN

AN 2001:185609 CAPLUS

DN 134:237836

TI Preparation of peptides for pulmonary delivery compositions via
 bioconjugation

IN Ezrin, Alan M.; Fleser, Angelica; Robitaille, Martin; Milner, Peter G.;
 Bridon, Dominique P.

PA Conjuchem, Inc., Can.

S0 PCT Int. Appl., 184 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 2001017568 | A2 | 20010315 | WO 2000-IB1429 | 20000907 |
| | WO 2001017568 | A3 | 20020711 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | US 6706892 | B1 | 20040316 | US 2000-656121 | 20000906 |
| | CA 2383798 | A1 | 20010315 | CA 2000-2383798 | 20000907 |
| | AU 2000074406 | A | 20010410 | AU 2000-74406 | 20000907 |
| | AU 781380 | B2 | 20050519 | | |
| | EP 1235618 | A2 | 20020904 | EP 2000-962766 | 20000907 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | | | |
| | JP 2003508501 | T | 20030304 | JP 2001-521356 | 20000907 |
| | EP 1889639 | A2 | 20080220 | EP 2007-20539 | 20000907 |
| | EP 1889639 | A3 | 20080409 | | |
| | R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, AL, LT, LV, MK, RO, SI | | | | |
| | US 20040156859 | A1 | 20040812 | US 2004-756774 | 20040112 |
| | AU 2005203768 | A1 | 20050915 | AU 2005-203768 | 20050822 |
| PRAI | US 1999-152681P | P | 19990907 | | |
| | US 2000-656121 | A3 | 20000906 | | |
| | EP 2000-962764 | A3 | 20000907 | | |
| | WO 2000-IB1429 | W | 20000907 | | |
| AB | Methods and compns. for pulmonary delivery of therapeutic agents which are capable of forming covalent bonds with a site of interest or which have formed a covalent bond with a pulmonary solution protein are disclosed. A | | | | |

modified therapeutic agent comprises a therapeutic agent (GP-41 peptides, BBB peptides, anticancer agents, antihistamines, etc.) and a reactive group which reacts in vivo with amino, hydroxyl or thiol groups on pulmonary components or blood components to form a stable covalent bond. In the examples, a series of peptides (e.g., modified RGD peptide AGYKPEKRGDAK) were synthesized by the solid phase method.

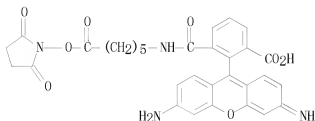
IT 1100835-78-6

RL: PRPH (Prophetic)

(Preparation of peptides for pulmonary delivery compositions via bioconjugation)

RN 1100835-78-6 CAPLUS

CN INDEX NAME NOT YET ASSIGNED



● HCl

OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)
 RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 60 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2001:152853 CAPLUS

DN 134:204343

TI Tag DNA polymerases containing substitution at position 681 (E→R),
 their sequences, recombinant production, and use in DNA sequencing

IN Davis, Maria; Nelson, John; Kumar, Shiv; Finn, Patrick J.; Nampalli,
 Satyaam; Flicke, Parke

PA Amersham Pharmacia Biotech Inc., USA

S0 PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| PI WO 2001014568 | A1 | 20010301 | WO 2000-US22150 | 20000810 |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2381206 | A1 | 20010301 | CA 2000-2381206 | 20000810 |
| AU 2000067687 | A | 20010319 | AU 2000-67687 | 20000810 |
| EP 1210440 | A1 | 20020605 | EP 2000-955487 | 20000810 |
| EP 1210440 | B1 | 20050720 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, | | | | |

IE, SI, LT, LV, FI, RO, MK, CY, AL
 JP 2003507072 T 20030225 JP 2001-518880 20000810
 AT 299940 T 20050815 AT 2000-955487 20000810
 PRAI US 1999-154739P P 19990917
 WO 2000-US22150 W 20000810

AB The invention provides two recombinant thermostable Taq DNA polymerases, referred to as TaqA271/F272M/F667Y/E681R and TaqD18A/E681R/F667Y, which have a substantial improvement of signal uniformity when used in DNA sequencing reactions. The invention relates that these DNA polymerases contain a novel substitution at 681, glutamic acid to arginine (E→R). The invention also provides for nucleic acid mols. encoding said DNA polymerases, DNA vectors containing said nucleic acid mols., and host cells (such as Escherichia coli) transformed with said DNA vectors. The invention further provides for the: (1) use of said thermostable DNA polymerases in DNA sequencing; (2) synthesis of fluorecently labeled polynucleotides using said DNA polymerases, and (3) a kit for sequencing DNA comprising said DNA polymerases and nucleic acid terminators having a net neg. or net pos. charge. Finally, the invention provides the amino acid sequences of DNA polymerases TaqA271/F272M/F667Y/E681R and TaqD18A/E681R/F667Y, which are based on the sequence from Thermus aquaticus. The invention related these recombinant DNA polymerases possess improved salt tolerance and showed that they can modulate the incorporation of terminators having a net pos. or a net neg. charge during the sequencing reaction.

IT 328252-39-7P 328252-40-0P 328252-42-2P
 328252-44-4P 328252-58-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (Taq DNA polymerases containing substitution at position 681 (E→R), their sequences, recombinant production and use in DNA sequencing)

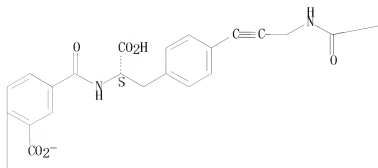
RN 328252-39-7 CAPLUS

CN Xanthylum, 3,6-diamino-9-[2-carboxy-4-[[[(1S)-1-carboxy-2-[4-[3-[[[(3',6'-dihydroxy-3-oxo-4',5'-disulfospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]amino]-1-propyn-1-yl]phenyl]ethyl]amino]carbonyl]phenyl]-, inner salt (CA INDEX NAME)

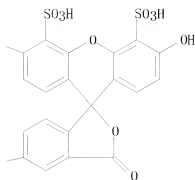
Absolute stereochemistry.

PAGE 1-A

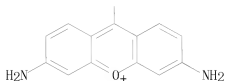
HO



PAGE 1-B



PAGE 2-A



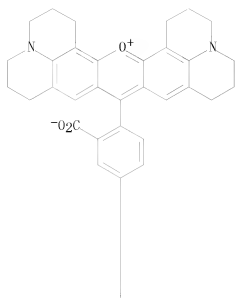
RN 328252-40-0 CAPLUS

CN 1H, 5H, 11H, 15H-Xantheno[2, 3, 4-ij:5, 6, 7-i' j']diquinolizin-18-ium,
 9-[2-carboxy-4-[[[(1S)-1-carboxy-2-[4-[3-[[[(3', 6'-dihydroxy-3-oxo-4', 5'-
 disulfospiro[isobenzofuran-1(3H), 9'-[9H]xanthen]-5-yl)carbonyl]amino]-1-
 propynyl]phenyl]ethyl]amino]carbonyl]phenyl]-2, 3, 6, 7, 12, 13, 16, 17-octahydro-
 , inner salt (9CI) (CA INDEX NAME)

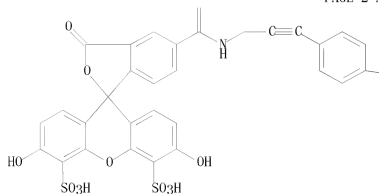
Absolute stereochemistry.

PAGE 1-A

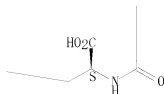
PAGE 1-B



PAGE 2-A



PAGE 2-B



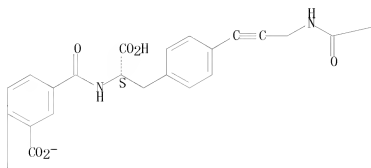
RN 328252-42-2 CAPLUS
 CN Xanthylum, 9-[2-carboxy-4-[[[(1S)-1-carboxy-2-[4-[3-[[[(3', 6'-dihydroxy-3-oxo-4', 5'-disulfospiro[isobenzofuran-1(3H), 9'-[9H]xanthen]-5-yl)carbonyl]amino]-1-propyn-1-yl]phenyl]ethyl]amino]carbonyl]phenyl]-3, 6-

bis(dimethylamino)-, inner salt (CA INDEX NAME)

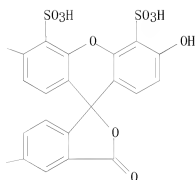
Absolute stereochemistry.

PAGE 1-A

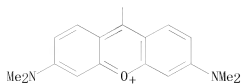
HO



PAGE 1-B



PAGE 2-A

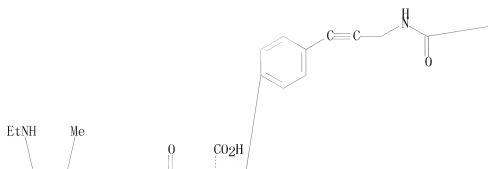


RN 328252-44-4 CAPLUS
 CN Xanthylum, 9-[4-[[[(1S)-1-carboxy-2-[4-[3-[[[(3',6'-dihydroxy-3-oxo-4',5'-disulfospiro[isobenzofuran-1(3H),9'-[9H]xanthen)-5-yl]carbonyl]amino]-1-propyn-1-yl]phenyl]ethyl]amino]carbonyl]-2-(ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethyl- (CA INDEX NAME)

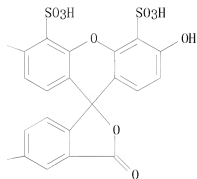
Absolute stereochemistry.

PAGE 1-A

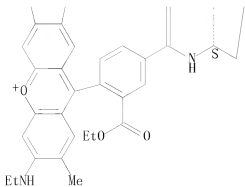
HO



PAGE 1-B

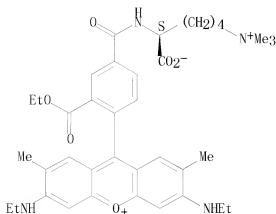


PAGE 2-A



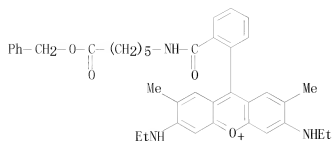
RN 328252-58-0 CAPLUS
 CN Xanthylum, 9-[4-[[[(1S)-1-carboxy-5-(trimethylammonio)pentyl]amino]carbonyl]-2-(ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethyl-, inner salt (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
 RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 61 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 2000:496103 CAPLUS
 DN 133:252254
 TI Efficient synthesis of rhodamine conjugates through the 2'-position
 AU Adamczyk, M.; Grote, J.
 CS Abbott Diagnostics Division, Department of Organic Chemistry (D9NM),
 Abbott Laboratories, Abbott Park, IL, 60064-6016, USA
 S0 Bioorganic & Medicinal Chemistry Letters (2000), 10(14), 1539-1541
 CODEN: BMCLE8; ISSN: 0960-894X
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 OS CASREACT 133:252254
 AB Reaction of substrates containing primary amines with rhodamine 2'-esters
 cleanly produces fluorescent rhodamine 2'-amide conjugates at ambient
 temperature. Only primary amines react with the esters under these conditions.
 Chemoselectivity can thus be achieved in substrates containing different types
 of amines.
 IT 295776-86-2P 295776-94-2P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation and fluorescence of)
 RN 295776-86-2 CAPLUS
 CN Xanthylum, 3,6-bis(ethylamino)-2,7-dimethyl-9-[2-[[[6-oxo-6-(phenylmethoxy)hexyl]amino]carbonyl]phenyl]-,
 1,1,1-trifluoromethanesulfonate (1:1) (CA INDEX NAME)
 CM 1
 CRN 295776-85-1
 CMF C39 H44 N3 O4



CM 2

CRN 37181-39-8

CMF C F3 03 S



RN 295776-94-2 CAPLUS

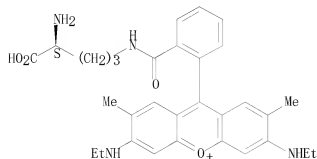
CN Xanthylum, 9-[2-[[[(4S)-4-amino-4-carboxybutyl]amino]carbonyl]phenyl]-3,6-bis(ethylamino)-2,7-dimethyl-, 1,1,1-trifluoromethanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 295776-93-1

CMF C31 H37 N4 04

Absolute stereochemistry.



CM 2

CRN 37181-39-8

CMF C F3 03 S



OSC.G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)
 RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 62 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN
 AN 2000:161551 CAPLUS
 DN 132:205138
 TI Energy transfer dyes
 IN Kumar, Shiv; Nampalli, Satyam; Khot, Mahesh
 PA Amersham Pharmacia Biotech, Inc., USA
 SO PCT Int. Appl., 53 pp.
 CODEN: PIXXD2

DT Patent
 LA English

FAN.CNT 1

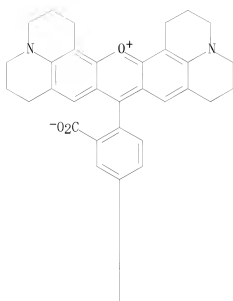
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 2000013026 | A1 | 20000309 | WO 1999-US19739 | 19990830 |
| | W: AU, CA, JP | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | GB 2341189 | A | 20000308 | GB 1999-20022 | 19990825 |
| | GB 2341189 | B | 20010613 | | |
| | CA 2341520 | A1 | 20000309 | CA 1999-2341520 | 19990830 |
| | AU 9956970 | A | 20000321 | AU 1999-56970 | 19990830 |
| | AU 767840 | B2 | 20031127 | | |
| | EP 1110088 | A1 | 20010627 | EP 1999-943985 | 19990830 |
| | EP 1110088 | B1 | 20031015 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | JP 2002523783 | T | 20020730 | JP 2000-567958 | 19990830 |
| | AT 252239 | T | 20031115 | AT 1999-943985 | 19990830 |
| | ES 2209492 | T3 | 20040616 | ES 1999-943985 | 19990830 |
| | US 6967250 | B1 | 20051122 | US 1999-386576 | 19990830 |
| PRAI | US 1998-98469P | P | 19980831 | | |
| | WO 1999-US19739 | W | 19990830 | | |
| OS | MARPAT 132:205138 | | | | |
| AB | Energy transfer dyes, their preparation, and their use as labels in biol. systems is disclosed. The dyes are preferably in the form of cassettes which enable their attachment to a variety of biol. materials. The dyes and the reagents that can be made from them offer a wide variety of fluorescent labels with large Stokes' shifts enabling their use in a variety of fluorescence applications over a wide range of the visible spectrum. | | | | |
| IT | 260397-87-3 | | | | |
| | RL: RCT (Reactant); RACT (Reactant or reagent) (energy transfer dyes) | | | | |
| RN | 260397-87-3 CAPLUS | | | | |
| CN | 1H, 5H, 11H, 15H-Xantheno[2, 3, 4-ij:5, 6, 7-i' j']diquinolizin-18-ium, 9-[2-carboxy-4-[[[(1S)-1-carboxy-2-[4-[3-[[[(3', 6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H), 9'-[9H]xanthen]-5-yl) carbonyl]amino]-1-propynyl]phenyl]ethyl]amino]carbonyl]phenyl]-2, 3, 6, 7, 12, 13, 16, 17-octahydro-, inner salt (9C)] (CA INDEX NAME) | | | | |

Absolute stereochemistry.

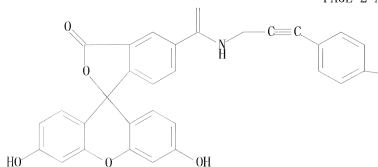
PAGE 1-A



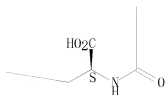
PAGE 1-B



PAGE 2-A



PAGE 2-B



IT 260397-88-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(energy transfer dyes)

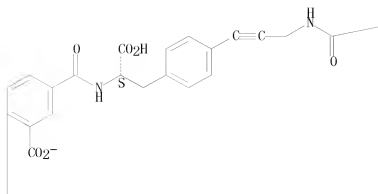
RN 260397-88-4 CAPLUS

CN Xanthylum, 3,6-diamino-9-[2-carboxy-4-[[[(1S)-1-carboxy-2-[4-[3-[[[(3',6'-
dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-
yl)carbonyl]amino]-1-propyn-1-yl]phenyl]ethyl]amino]carbonyl]phenyl]-,
inner salt (CA INDEX NAME)

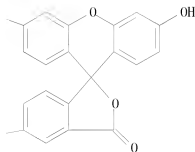
Absolute stereochemistry.

PAGE 1-A

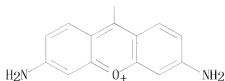
HO



PAGE 1-B



PAGE 2-A



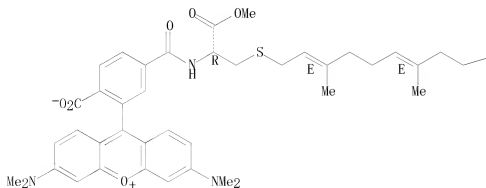
OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)
 RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 63 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN
 AN 1999:799752 CAPLUS
 DN 132:148214
 TI The Specific Binding of Small Molecule Isoprenoids to rhoGDP Dissociation Inhibitor (rhoGDI)

- AU Mondal, Madhu S.; Wang, Zhaolin; Seeds, Andrew M.; Rando, Robert R.
 CS Department of Biological Chemistry and Molecular Pharmacology, Harvard Medical School, Boston, MA, 02115, USA
 SO Biochemistry (2000), 39(2), 406-412
 CODEN: BICHAW; ISSN: 0006-2960
 PB American Chemical Society
 DT Journal
 LA English
 AB The activities of small G-proteins are in part regulated by their interactions with GDI proteins. This binding is thought to be dependent on the C-terminal isoprenoid modification (geranylgeranyl or farnesyl) of these proteins. G-proteins are generally isoprenylated/methylated at their C-terminal cysteine residues. A quant. fluorescence assay is reported here to evaluate the specificity of binding of rhoGDI. A rhodamine-labeled geranylgeranylated/methylated cysteine derivative is used to measure its binding to rhoGDI. Saturable binding in the low micromolar range is found with various geranylgeranylated/farnesylated analogs. Interestingly, the carboxymethylated derivs. bound significantly better than their free acid counterparts, suggesting that the state of methylation of the analogs is important for binding. The binding is also selective with respect to isoprenoid. Analogs containing hydrophobic modifications other than geranylgeranyl or farnesyl do not bind with significant affinities. These data demonstrate a substantial degree of specificity in the binding of isoprenoids to a protein important in signal transduction.
- IT 257299-66-4
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (the specific binding of small mol. isoprenoids to rhoGDP dissociation inhibitor (rhoGDI))
- RN 257299-66-4 CAPLUS
- CN Xanthylum, 9-[2-carboxy-5-[[[(1R)-2-methoxy-2-oxo-1-[[[(2E, 6E, 10E)-3, 7, 11, 15-tetramethyl-2, 6, 10, 14-hexadecatetraen-1-yl]thio]methyl]ethyl]amino]carbonyl]phenyl]-3, 6-bis(dimethylamino)-, inner salt (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

PAGE 1-A



PAGE 1-B



OSC.G 20 THERE ARE 20 CAPLUS RECORDS THAT CITE THIS RECORD (20 CITINGS)
 RE.CNT 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 64 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 1999:561610 CAPLUS
 DN 131:166214
 TI Energy transfer dyes with enhanced fluorescence, reagents containing them,
 and their use in nucleic acid sequencing
 IN Lee, Linda G.; Spurgeon, Sandra L.; Rosenblum, Barnett
 PA Perkin-Elmer Corporation, USA
 SO U.S., 77 pp., Cont.-in-part of U.S. 5,863,727.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 6

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | US 5945526 | A | 19990831 | US 1998-46203 | 19980323 |
| | US 5863727 | A | 19990126 | US 1996-642330 | 19960503 |
| | US 5847162 | A | 19981208 | US 1996-672196 | 19960627 |
| | JP 2003221515 | A | 20030808 | JP 2002-280013 | 19970521 |
| | US 6335440 | B1 | 20020101 | US 1999-272097 | 19990318 |
| | US 20020086985 | A1 | 20020704 | US 2001-14743 | 20011029 |
| | US 6849745 | B2 | 20050201 | | |
| | US 20050069912 | A1 | 20050331 | US 2004-788836 | 20040226 |
| | US 7169939 | B2 | 20070130 | | |
| | US 20050112781 | A1 | 20050526 | US 2004-788660 | 20040226 |
| | US 7550570 | B2 | 20090623 | | |
| | JP 2004305217 | A | 20041104 | JP 2004-152623 | 20040521 |
| | US 20070154924 | A1 | 20070705 | US 2006-617667 | 20061228 |
| | US 7423140 | B2 | 20080909 | | |
| | US 20070161026 | A1 | 20070712 | US 2006-617660 | 20061228 |
| | US 7399854 | B2 | 20080715 | | |
| | US 20070161027 | A1 | 20070712 | US 2006-617665 | 20061228 |
| | US 7388092 | B2 | 20080617 | | |
| | US 20070154925 | A1 | 20070705 | US 2006-618679 | 20061229 |
| | US 7449298 | B2 | 20081111 | | |
| | US 20070154926 | A1 | 20070705 | US 2006-618683 | 20061229 |
| | US 7452672 | B2 | 20081118 | | |
| | US 20070154927 | A1 | 20070705 | US 2006-618693 | 20061229 |
| | US 20070207477 | A1 | 20070906 | US 2006-618688 | 20061229 |
| | US 7449149 | B2 | 20081111 | | |
| | US 20070212709 | A1 | 20070913 | US 2006-618663 | 20061229 |
| | US 7432058 | B2 | 20081007 | | |
| | US 20080268509 | A1 | 20081030 | US 2006-618667 | 20061229 |
| | US 20090118485 | A1 | 20090507 | US 2008-205817 | 20080905 |
| | JP 2009073838 | A | 20090409 | JP 2008-249238 | 20080926 |
| PRAI | US 1996-642330 | A2 | 19960503 | | |
| | US 1996-672196 | A2 | 19960627 | | |

| | | |
|----------------|----|----------|
| US 1996-726462 | A1 | 19961004 |
| JP 1998-502974 | A3 | 19970521 |
| JP 2002-280013 | A3 | 19970521 |
| US 1998-46203 | A1 | 19980323 |
| US 1999-272097 | A1 | 19990318 |
| US 2000-578920 | A1 | 20000525 |
| US 2001-14743 | A1 | 20011029 |
| US 2004-788836 | A1 | 20040226 |
| US 2006-617667 | A1 | 20061228 |

OS MARPAT 131:166214

AB Novel linkers for linking a donor dye to an acceptor dye in an energy transfer fluorescent dye are provided. These linkers facilitate the efficient transfer of energy between a donor and acceptor dye in an energy transfer dye. One of these linkers for linking a donor dye to an acceptor dye in an energy transfer fluorescent dye has the general structure R21ZCOR2R3 (R1=C1-5 alkyl attached to the donor dye; Z=NH, S, O; R2=alkene, diene, alkyne, 5-6-membered ring having at least one unsat. bond or a fused ring structure which is attached to the carbonyl carbon; R3=functional group which attaches the linker to the acceptor dye). A preferred linker is CH₂NHCOC₆H₄CH₂NHCO. Thus, 9-(2,4-dicarboxyphenyl)-3,6-bis(dimethylamino)xanthylium was esterified (4-CO₂H) with N-hydroxysuccinimide (I), condensed with 4-H₂NCH₂C₆H₄CO₂H, re-esterified with I, and condensed with 4'-(aminomethyl)-5-carboxyfluorescein to give an energy transfer dye (II), esterification of which with I provided a site for coupling to a nucleoside. In DNA sequencing, an oligonucleotide labeled with II was brighter than one labeled with the direct amide of the resp. carboxyrhodamine and (aminomethyl)fluorescein not containing a spacer bridge.

IT 212390-03-9P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(energy transfer dyes with enhanced fluorescence, reagents containing them, and their use in nucleic acid sequencing)

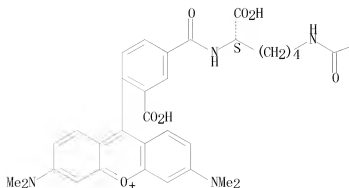
RN 212390-03-9 CAPLUS

CN Xanthylium, 9-[2-carboxy-4-[[[(1S)-1-carboxy-5-[[[3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]amino]pentyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-(CA INDEX NAME)

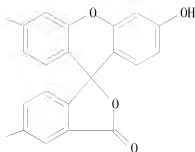
Absolute stereochemistry.

PAGE 1-A

HO



PAGE 1-B



OSC.G 24 THERE ARE 24 CAPLUS RECORDS THAT CITE THIS RECORD (31 CITINGS)
 RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 65 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN

AN 1999:422312 CAPLUS

DN 131:226424

TI Imaging of caspase-3 activation in HeLa cells stimulated with etoposide using a novel fluorescent probe

AU Mizukami, Shin; Kikuchi, Kazuya; Higuchi, Tsunehiko; Urano, Yasuteru; Mashima, Tetsuo; Tsuruo, Takashi; Nagano, Tetsuo

CS Graduate School of Pharmaceutical Sciences, The University of Tokyo, Bunkyo-ku, Tokyo, Japan

S0 FEBS Letters (1999), 453(3), 356-360

CODEN: FEBLAL; ISSN: 0014-5793

PB Elsevier Science B.V.

DT Journal

LA English

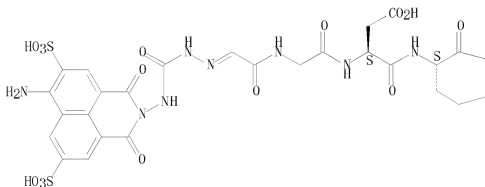
AB Microscopic visualization of intracellular enzyme activity can provide information about the physiol. role of the enzyme. Caspases are cysteine proteases that have critical roles in the execution of apoptosis. General

fluorometric substrates of caspase-3, such as DEVD-MCA, are unsuitable for imaging because they are excited at short wavelength, so we designed and synthesized novel fluorescent probes that are excited at suitable wavelengths for detecting caspase-3 activity in living cells. Using one of these probes, we succeeded in microscopic visualization of caspase-3-like activity within HeLa cells treated with etoposide. The caspase-3-like activity was increased in the cytosol at first, then expanded to the whole cell.

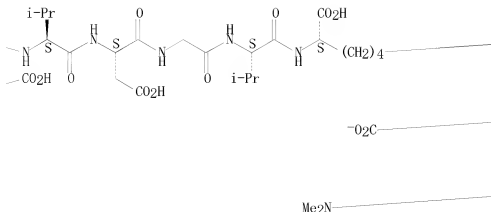
- IT 244075-40-9 244075-42-1
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (imaging of caspase-3 activation using novel fluorescent probe in etoposide-stimulated HeLa cells)
- RN 244075-40-9 CAPLUS
- CN L-Lysine, N-[[[[(6-amino-1,3-dioxo-5,8-disulfo-1H-benz[de]isoquinolin-2(3H)-yl)amino]carbonyl]hydrazono]acetyl]glycyl-L- α -aspartyl-L- α -glutamyl-L-valyl-L- α -aspartylglycyl-L-valyl-N6-[4-[3,6-bis(dimethylamino)xanthylum-9-yl]-3-carboxybenzoyl]-, inner salt (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.

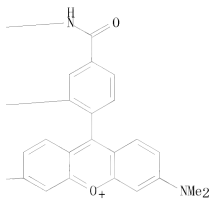
PAGE 1-A



PAGE 1-B



PAGE 1-C

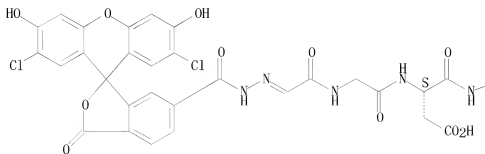


RN 244075-42-1 CAPLUS

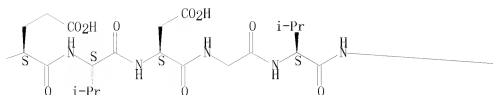
CN L-Lysine, N-[[[(2', 7'-dichloro-3', 6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H), 9'-[9H]xanthen]-6-yl) carbonyl]hydrazono]acetyl]glycyl-L- α -aspartyl-L- α -glutamyl-L-valyl-L- α -aspartylglycyl-L-valyl-N6-[3-carboxy-4-(2, 3, 6, 7, 12, 13, 16, 17-octahydro-1H, 5H, 11H, 15H-xantheno[2, 3, 4-ij:5, 6, 7-i' j']diquinolizin-18-ium-9-yl)benzoyl]-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

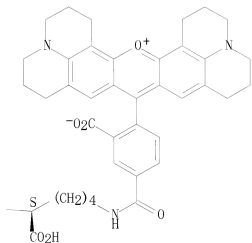
PAGE 1-A



PAGE 1-B



PAGE 1-C



IT 244075-41-0
 RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process);
 USES (Uses)
 (imaging of caspase-3 activation using novel fluorescent probe in etoposide-stimulated HeLa cells)

RN 244075-41-0 CAPLUS
 CN L-Lysine, N-[[[(2',7'-dichloro-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9']-[9H]xanthen]-6-yl)carbonyl]hydrazono]acetyl]glycyl-L- α -aspartyl-L- α -glutamyl-L-valyl-L- α -aspartylglycyl-L-valyl-N6-[4-[3,6-bis(dimethylamino)xanthylum-9-yl]-3-carboxybenzoyl]-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.

SO PCT Int. Appl., 63 pp.

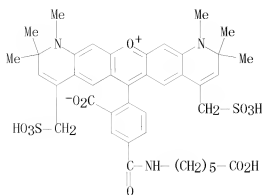
CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 2

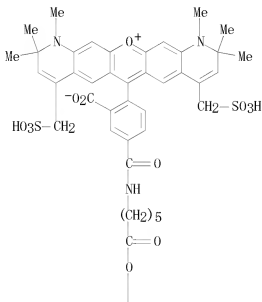
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 9915517 | A1 | 19990401 | WO 1998-US19921 | 19980923 |
| | W: AU, CA, JP, US | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | US 6130101 | A | 20001010 | US 1997-935963 | 19970923 |
| | CA 2272403 | A1 | 19990401 | CA 1998-2272403 | 19980923 |
| | AU 9895046 | A | 19990412 | AU 1998-95046 | 19980923 |
| | AU 750380 | B2 | 20020718 | | |
| | EP 966458 | A1 | 19991229 | EP 1998-948483 | 19980923 |
| | EP 966458 | B1 | 20030813 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, IE | | | | |
| | JP 2001508494 | T | 20010626 | JP 1999-519270 | 19980923 |
| | AT 247098 | T | 20030815 | AT 1998-948483 | 19980923 |
| | WO 2000017650 | A1 | 20000330 | WO 1999-US22193 | 19990923 |
| | W: AU, CA, JP | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | AU 9964002 | A | 20000410 | AU 1999-64002 | 19990923 |
| PRAI | US 1997-935963 | A | 19970923 | | |
| | WO 1998-US19921 | W | 19980923 | | |
| | US 1998-209045 | A | 19981209 | | |
| | WO 1999-US22193 | W | 19990923 | | |
| OS | MARPAT 130:264438 | | | | |
| AB | The present invention describes xanthene dyes, including rhodamines, rhodols and fluoresceins that are substituted one or more times by a sulfonic acid or a salt of a sulfonic acid. The dyes of the invention, including chemical reactive dyes and dye-conjugates are useful as fluorescent probes, particularly in biol. samples. | | | | |
| IT | 222159-85-5P | | | | |
| | RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) | | | | |
| | (sulfonated xanthene derivs. synthesis and applications as fluorescent stains) | | | | |
| RN | 222159-85-5 CAPLUS | | | | |
| CN | Pyran[3,2-g:5,6-g']diquinolin-13-ium, 6-[2-carboxy-4-[[5-carboxypentyl]amino]carbonyl]phenyl]-1,2,10,11-tetrahydro-1,2,2,10,10,11-hexamethyl-4,8-bis(sulfomethyl)-, inner salt, monolithium salt (9CI) (CA INDEX NAME) | | | | |



● Li

IT 222159-86-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (sulfonated xanthene derivs. synthesis and applications as fluorescent
 stains)
 RN 222159-86-6 CAPLUS
 CN Pyrano[3, 2-g:5, 6-g']diquinolin-13-ium,
 6-[2-carboxy-4-[[[(2, 5-dioxo-1-pyrrolidinyl)oxy]-6-
 oxohexyl]amino]carbonyl]phenyl]-1, 2, 10, 11-tetrahydro-1, 2, 10, 10, 11-
 hexamethyl-4, 8-bis(sulfomethyl)-, inner salt, monolithium salt (9CI) (CA
 INDEX NAME)

PAGE 1-A



PAGE 2-A



● Li

OSC.G 20 THERE ARE 20 CAPLUS RECORDS THAT CITE THIS RECORD (21 CITINGS)
 RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 67 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 1999:64819 CAPLUS
 DN 130:110648
 TI Compounds having energy transfer function and determination method for DNA
 base sequencing by using the same
 IN Hayashizaki, Yoshihide; Tanaka, Takumi
 PA The Institute of Physical and Chemical Research, Japan; Wako Pure Chemical
 Industries, Ltd.
 SO PCT Int. Appl., 75 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAX.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9902544 | A1 | 19990121 | WO 1998-JP3093 | 19980710 |
| | W: CA, JP, US | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | CA 2265551 | A1 | 19990121 | CA 1998-2265551 | 19980710 |
| | EP 967219 | A1 | 19991229 | EP 1998-931037 | 19980710 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | US 6482938 | B1 | 20021119 | US 1999-254547 | 19990917 |
| | JP 2004135673 | A | 20040513 | JP 2003-365798 | 20031027 |
| | JP 3656075 | B2 | 20050602 | | |
| | JP 2004329218 | A | 20041125 | JP 2004-198320 | 20040705 |
| PRAI | JP 1997-186886 | A | 19970711 | | |
| | JP 1999-508451 | A3 | 19980710 | | |
| | WO 1998-JP3093 | W | 19980710 | | |
| | JP 2003-365798 | A3 | 20031027 | | |
| OS | MARPAT 130:110648 | | | | |
| GI | | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Compds. Q1VCOR1(NHW2)NH(COCHR2NR3)mW1 (I; Q1 = mono or oligonucleotide residue; V = C.tpbond.C(CH2)n1NH, or CH:CH(CH2)n2NH; n1, n2, m > 1; R1 = trivalent radical; R2, R3 = H or hydrocarbyl, etc.; W1, W2 = fluorescent group) having two reporters capable of serving as a donor and an acceptor in energy transfer, for example, a fluorescent group together with a 2',3'-deoxyribonucleotide residue or a 3'-deoxyribonucleotide residue, are prepared I can serve as a terminator in the chain terminator method. These

two reporters are located at a sufficient interval for inducing energy transfer. A method for DNA base sequencing by the chain terminator method wherein the chain termination reaction is effected with the use of the above terminators. I, having two reporters capable of serving as a donor and an acceptor in energy transfer, are usable as primers or initiators in a method for DNA base sequencing with the use of the chain terminator method and a method for DNA base sequencing with the use of these compds. Thus, FAM-(Pro)8-Lys-OH was condensed with 5-carboxytetramethylrhodamine succinimide ester in the presence of Et3N at room temperature for 19 h to give FAM-(Pro)8-Lys(= TMR) (II; R = OH) which was further condensed with 5-(6'-amino-1''-hexynyl)-3'-deoxyuridine-5'-triphosphate using N,N'-disuccinimidyl carbonate, 4-dimethylaminopyridine in aqueous DMF to give TMR-labeled 3'-deoxyuridine-5'-triphosphate II (R = Q).

| | | | |
|----|--------------|--------------|--------------|
| IT | 219728-94-6P | 219728-95-7P | 219728-96-8P |
| | 219728-97-9P | 219728-98-0P | 219728-99-1P |
| | 219729-00-7P | 219729-01-8P | 219729-02-9P |
| | 219729-03-0P | 219729-04-1P | 219729-05-2P |
| | 219729-06-3P | 219729-07-4P | 219729-08-5P |
| | 219729-09-6P | 219729-10-9P | 219729-11-0P |

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

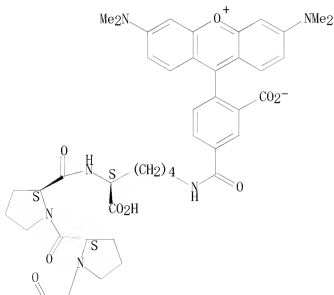
(preparation of compds. having energy transfer function and application for determination of DNA base sequencing)

RN 219728-94-6 CAPLUS

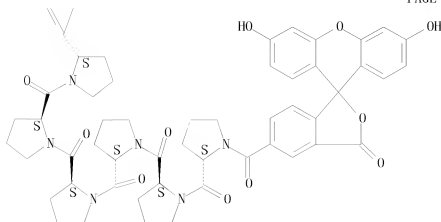
CN L-Lysine, 1-[(3', 6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H), 9'-[9H]xanthen]-5-yl)carbonyl]-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-N6-[4-[3, 6-bis(dimethylamino)xanthylium-9-yl]-3-carboxybenzoyl]-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



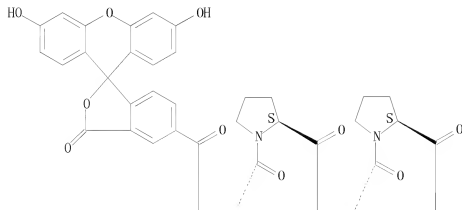
PAGE 2-A



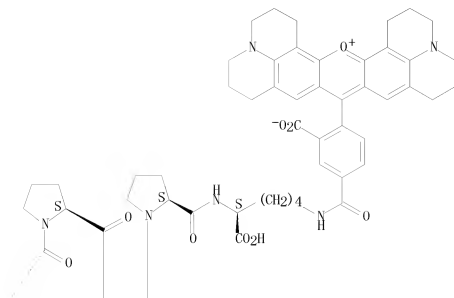
RN 219728-95-7 CAPLUS
 CN L-Lysine, 1-[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-N6-[3-carboxy-4-(2,3,6,7,12,13,16,17-octahydro-1H,5H,11H,15H-xantheno[2,3,4-ij:5,6,7-i'j']diquinolizin-18-ium-9-yl)benzoyl]-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

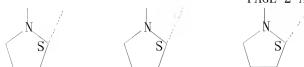
PAGE 1-A



PAGE 1-B



PAGE 2-A



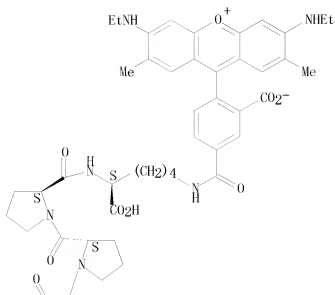
PAGE 2-B



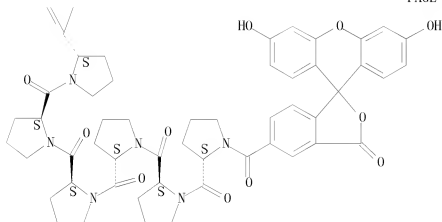
RN 219728-96-8 CAPLUS
 CN L-Lysine, 1-[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-N6-[4-[3,6-bis(ethylamino)-2,7-dimethylxanthylium-9-yl]-3-carboxybenzoyl]-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

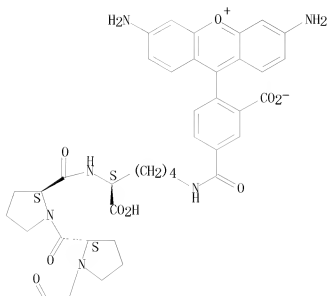


RN 219728-97-9 CAPLUS

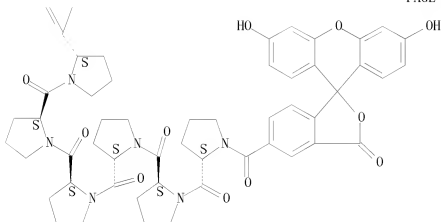
CN L-Lysine, 1-[(3', 6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H), 9'-[9H]xanthen]-5-yl)carbonyl]-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-N6-[3-carboxy-4-(3, 6-diaminoxanthylum-9-yl)benzoyl]-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



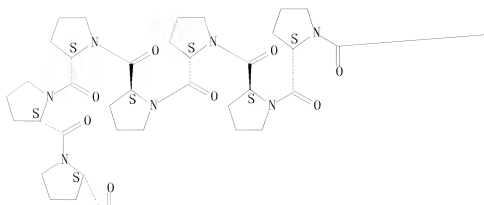
RN 219728-98-0 CAPLUS

CN L-Lysine, 1-[(3', 6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H), 9']-[9H]xanthen]-5-yl)carbonyl]-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-N6-[3-[3, 6-bis(dimethylamino)xanthylium-9-yl]-4-carboxybenzoyl]-, inner salt (9CI)
(CA INDEX NAME)

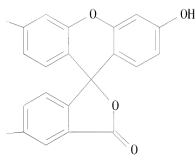
Absolute stereochemistry.

PAGE 1-A

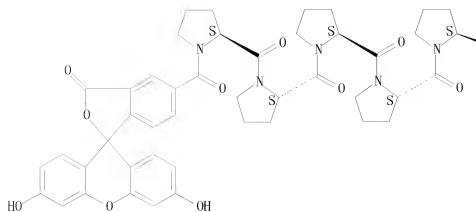
HO



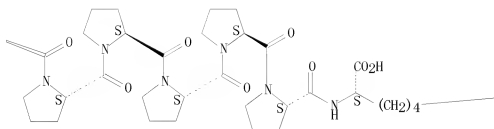
PAGE 1-B



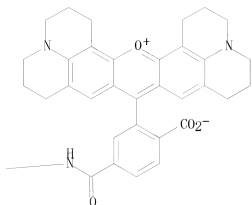
PAGE 1-A



PAGE 1-B



PAGE 1-C



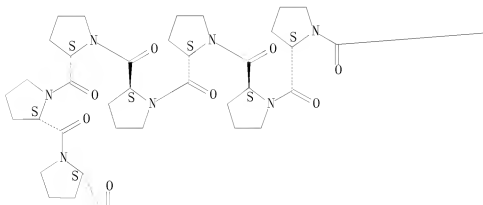
RN 219729-00-7 CAPLUS

CN L-Lysine, 1-[(3', 6'-dihydroxy-3-oxospiro[isobenzofuran-1 (3H), 9' -
[9H]xanthen]-5-yl)carbonyl]-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-
prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-N6-[3-[3, 6-bis(ethylamino)-2, 7-
dimethylxanthylium-9-yl]-4-carboxybenzoyl]-, inner salt (9CI) (CA INDEX
NAME)

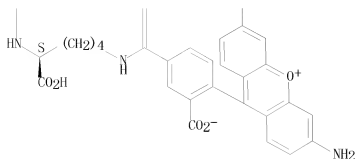
Absolute stereochemistry.

PAGE 1-A

HO



PAGE 3-A

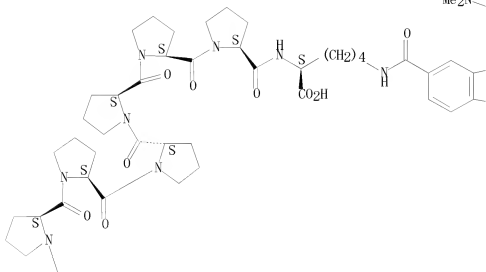


RN 219729-02-9 CAPLUS

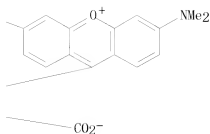
CN L-lysine, 1-[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9']-[9H]xanthen]-5-yl)carbonyl]-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-N6-[3-[3,6-bis(dimethylamino)xanthylium-9-yl]-4-carboxybenzoyl]-, inner salt (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

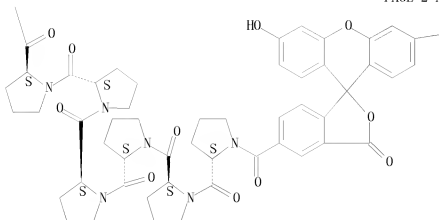
PAGE 1-A

Me₂N

PAGE 1-B



PAGE 2-A



PAGE 2-B

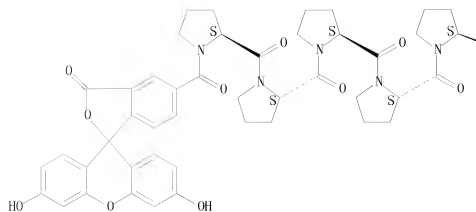


RN 219729-03-0 CAPLUS

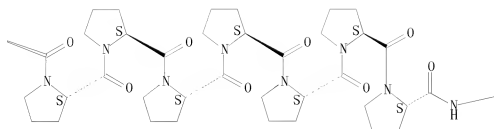
CN L-Lysine, 1-[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-N6-[4-carboxy-3-(2,3,6,7,12,13,16,17-octahydro-1H,5H,11H,15H-xantheno[2,3,4-ij:5,6,7-i'j']diquinolizin-18-ium-9-yl)benzoyl]-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

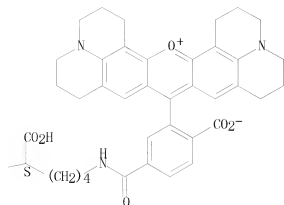
PAGE 1-A



PAGE 1-B



PAGE 1-C

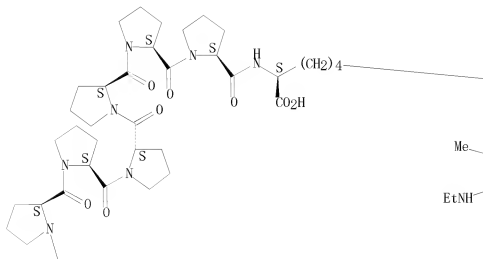


RN 219729-04-1 CAPLUS

CN L-Lysine, 1-[[[3', 6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H), 9' -
[9H]xanthen]-5-yl)carbonyl]-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-
prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-N6-[3-[3, 6-
bis(ethylamino)-2, 7-dimethylxanthylium-9-yl]-4-carboxybenzoyl]-, inner
salt (9CI) (CA INDEX NAME)

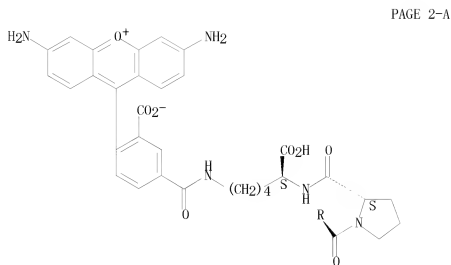
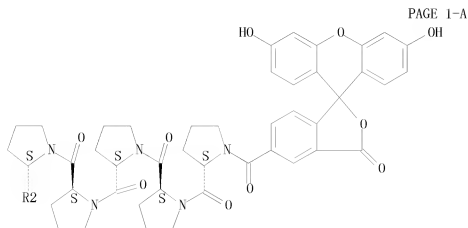
Absolute stereochemistry.

PAGE 1-A

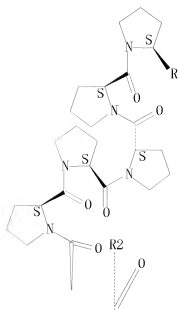


4-(3,6-diaminoxanthylum-9-yl)benzoyl]-, inner salt (9CI) (CA INDEX NAME)

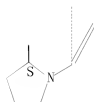
Absolute stereochemistry.



PAGE 3-A



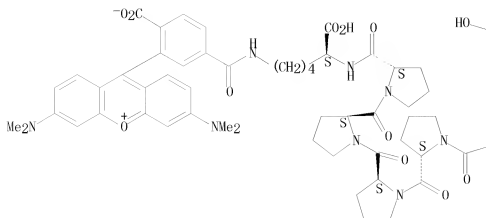
PAGE 4-A



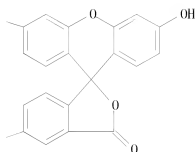
RN 219729-06-3 CAPLUS
 CN L-Lysine, 1-[(3', 6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H), 9'-[9H]xanthen]-5-yl)carbonyl]-L-prolyl-L-prolyl-L-prolyl-L-prolyl-N6-[3-[3, 6-bis(dimethylamino)xanthylium-9-yl]-4-carboxybenzoyl]-, inner salt (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

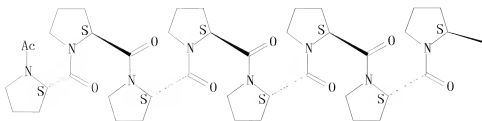


RN 219729-07-4 CAPLUS

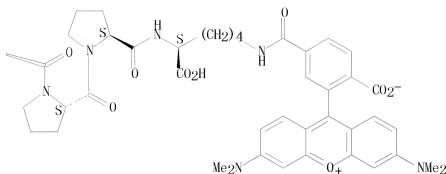
CN L-Lysine, 1-[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9']-[9H]xanthen]-5-yl)carbonyl]-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-N6-[3-[3,6-bis(dimethylamino)xanthylum-9-yl]-4-carboxybenzoyl]-, inner salt (9Cl) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

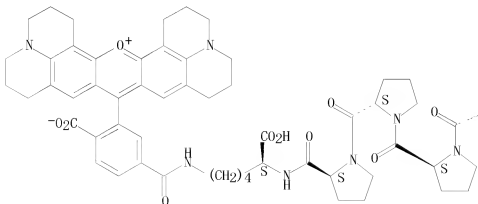


RN 219729-09-6 CAPLUS

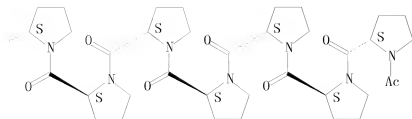
CN L-Lysine, 1-acetyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-N6-[4-carboxy-3-(2,3,6,7,12,13,16,17-octahydro-1H,5H,11H,15H-xantheno[2,3,4-ij:5,6,7-i'j']diquinolizin-18-ium-9-yl)benzoyl]-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

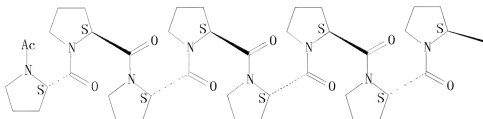


RN 219729-10-9 CAPLUS

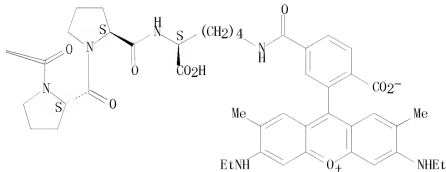
CN L-Lysine, 1-acetyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-N6-[3-[3,6-bis(ethylamino)-2,7-dimethylxanthylum-9-yl]-4-carboxybenzoyl]-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

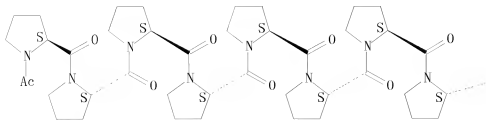


RN 219729-11-0 CAPLUS

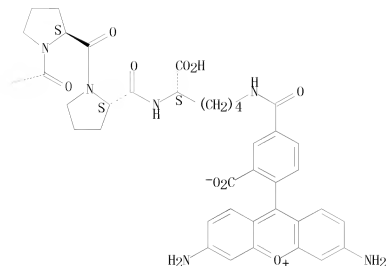
CN L-Lysine, 1-acetyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-L-prolyl-N6-[3-carboxy-4-(3,6-diaminoxanthylum-9-yl)benzoyl]-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
 RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 68 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 1998:747616 CAPLUS
 DN 130:11982
 TI Fluorogenic protease substrates based on dye-dimerization
 IN Wei, Ai-Ping; Williams, Michael G.
 PA Minnesota Mining and Manufacturing Co., USA
 SO PCT Int. Appl., 27 pp.
 CODEN: PIXXD2

DT Patent
 LA English

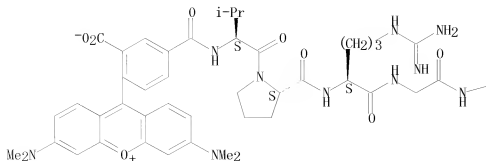
FAN.CNT 2

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|---|----------|-----------------|----------|
| PI WO 9850579 | A1 | 19981112 | WO 1997-US16579 | 19970908 |
| W: | AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, | | | |

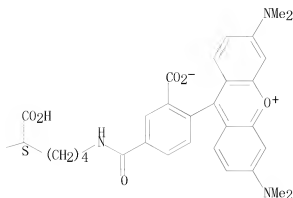
[illegible]

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
 RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 69 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1998:605029 CAPLUS

DN 129:213504

OREF 129:43299a, 43302a

TI Protease indicator substrates exhibiting increased fluorescence due to conformational change following cleavage

IN Komoriya, Akira; Packard, Beverly S.

PA Oncoimmunin, Inc., USA

SO PCT Int. Appl., 90 pp.

CODEN: PIXXD2

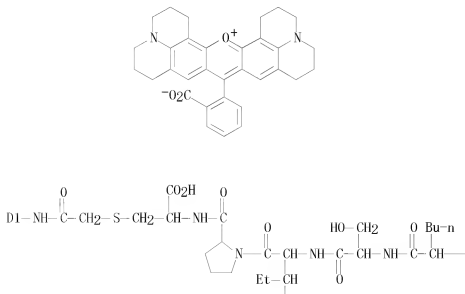
DT Patent

LA English

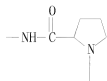
FAN.CNT 6

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|----------|
| PI | WO 9837226 | A1 | 19980827 | WO 1998-US3000 | 19980220 |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW | | | | |
| | RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | US 6037137 | A | 20000314 | US 1997-802981 | 19970220 |
| | CA 2280811 | A1 | 19980827 | CA 1998-2280811 | 19980220 |
| | AU 9866567 | A | 19980909 | AU 1998-66567 | 19980220 |
| | AU 745148 | B2 | 20020314 | | |
| | EP 988394 | A1 | 20000329 | EP 1998-908564 | 19980220 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | JP 2001514492 | T | 20010911 | JP 1998-536778 | 19980220 |
| | JP 4298796 | B2 | 20090722 | | |
| | US 6936687 | B1 | 20050830 | US 1999-394019 | 19990910 |
| | US 20040096926 | A1 | 20040520 | US 2001-874350 | 20010604 |
| | US 7312302 | B2 | 20071225 | | |

PAGE 1-A



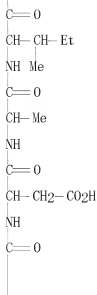
PAGE 1-B



PAGE 2-A



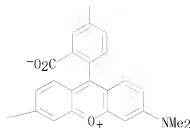
PAGE 2-B



PAGE 3-A



PAGE 3-B



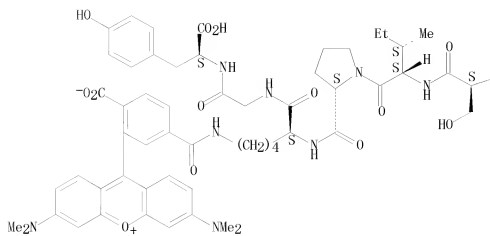
IT 212207-37-9P 212268-91-2P
 RL: ARU (Analytical role, unclassified); BPR (Biological process); BSU
 (Biological study, unclassified); PRP (Properties); SPN (Synthetic
 preparation); ANST (Analytical study); BIOL (Biological study); PREP
 (Preparation); PROC (Process)
 (protease indicator substrates exhibiting increased fluorescence due to
 conformational change following cleavage)

RN 212207-37-9 CAPLUS

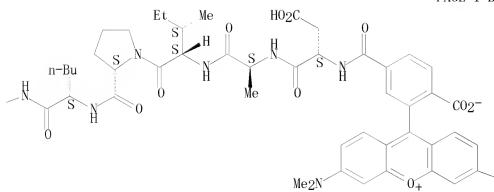
CN L-Tyrosine, N-[3-[3,6-bis(dimethylamino)xanthylum-9-yl]-4-carboxybenzoyl]-
 L- α -aspartyl-L-alanyl-L-isoileucyl-L-prolyl-L-norleucyl-L-seryl-L-
 isoileucyl-L-prolyl-N6-[3-[3,6-bis(dimethylamino)xanthylum-9-yl]-4-
 carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

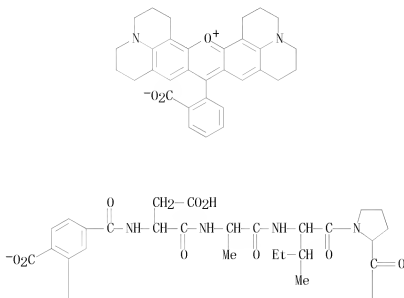


PAGE 1-C

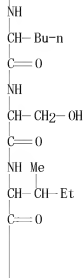
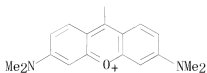
NMe₂

CN L-Tyrosine, N-[3-[3,6-bis(dimethylamino)xanthylium-9-yl]-4-carboxybenzoyl]-L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-isoleucyl-L-prolyl-N6-[3(or 4)-carboxy-4(or 3)-(2,3,6,7,12,13,16,17-octahydro-1H,5H,11H,15H-xantheno[2,3,4-ij:5,6,7-i',j']diquinolizin-18-ium-9-yl)benzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

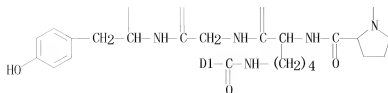
PAGE 1-A



PAGE 2-A



PAGE 3-A



IT 212207-39-1P

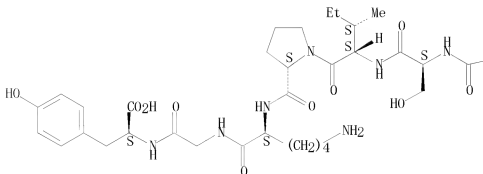
RL: ARU (Analytical role, unclassified); PRP (Properties); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)
 (protease indicator substrates exhibiting increased fluorescence due to conformational change following cleavage)

RN 212207-39-1 CAPLUS

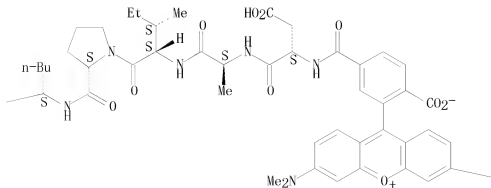
CN L-Tyrosine, N-[3-[3,6-bis(dimethylamino)xanthylum-9-yl]-4-carboxybenzoyl]-L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-isoleucyl-L-prolyl-L-lysylglycyl-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PAGE 1-C

-NMe2

OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
 RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 70 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN
 AN 1998:599359 CAPLUS
 DN 129:212480
 OREF 129:43050h, 43051a
 TI Energy transfer dyes with enhanced fluorescence
 IN Lee, Linda G.; Spurgeon, Sandra L.; Rosenblum, Barnett
 PA The Perkin Elmer Corp., USA
 S0 U.S., 83 pp., Cont.-in-part of U. S. Ser. No. 642,330.
 CODEN: USXXAM
 DT Patent
 LA English
 FAX.CNT 6

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|-----------|-----------------|----------|
| PI US 5800996 | A | 19980901 | US 1996-726462 | 19961004 |
| US 5863727 | A | 19990126 | US 1996-642330 | 19960503 |
| US 5847162 | A | 19981208 | US 1996-672196 | 19960627 |
| CA 2203494 | A1 | 19971103 | CA 1997-2203494 | 19970423 |
| CA 2203494 | C | 20001226 | | |
| CA 2297589 | A1 | 19971103 | CA 1997-2297589 | 19970423 |
| EP 805190 | A2 | 19971105 | EP 1997-303039 | 19970502 |
| EP 805190 | A3 | 19980107 | | |
| EP 805190 | B1 | 19991215 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| AU 9719995 | A | 19971120 | AU 1997-19995 | 19970502 |
| AU 691143 | B2 | 19980507 | | |
| EP 940450 | A1 | 19990908 | EP 1999-201120 | 19970502 |
| EP 940450 | B1 | 200060802 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| AT 187752 | T | 20000115 | AT 1997-303039 | 19970502 |
| AT 335051 | T | 200060815 | AT 1999-201120 | 19970502 |
| JP 10088124 | A | 19980407 | JP 1997-115920 | 19970506 |
| JP 3090625 | B2 | 20000925 | | |
| JP 2000154381 | A | 20000606 | JP 2000-10931 | 19970506 |
| JP 2000187036 | A | 20000704 | JP 2000-10932 | 19970506 |
| JP 2003274999 | A | 20030930 | JP 2003-28821 | 19970506 |
| JP 3499238 | B2 | 20040223 | | |
| JP 2003221515 | A | 20030808 | JP 2002-280013 | 19970521 |

| | | | | | |
|------|-------------------|----|----------|----------------|----------|
| | US 6335440 | B1 | 20020101 | US 1999-272097 | 19990318 |
| | JP 2000154332 | A | 20000606 | JP 2000-10933 | 20000119 |
| | JP 3592173 | B2 | 20041124 | | |
| | US 20020086985 | A1 | 20020704 | US 2001-14743 | 20011029 |
| | US 6849745 | B2 | 20050201 | | |
| | JP 2004043819 | A | 20040212 | JP 2003-288285 | 20030806 |
| | JP 2004068023 | A | 20040304 | JP 2003-288286 | 20030806 |
| | US 20050069912 | A1 | 20050331 | US 2004-788836 | 20040226 |
| | US 7169939 | B2 | 20070130 | | |
| | US 20050112781 | A1 | 20050526 | US 2004-788660 | 20040226 |
| | US 7550570 | B2 | 20090623 | | |
| | JP 2004250713 | A | 20040909 | JP 2004-136932 | 20040430 |
| | JP 2004305217 | A | 20041104 | JP 2004-152623 | 20040521 |
| | US 20070154924 | A1 | 20070705 | US 2006-617667 | 20061228 |
| | US 7423140 | B2 | 20080909 | | |
| | US 20070161026 | A1 | 20070712 | US 2006-617660 | 20061228 |
| | US 7399854 | B2 | 20080715 | | |
| | US 20070161027 | A1 | 20070712 | US 2006-617665 | 20061228 |
| | US 7388092 | B2 | 20080617 | | |
| | US 20070154925 | A1 | 20070705 | US 2006-618679 | 20061229 |
| | US 7449298 | B2 | 20081111 | | |
| | US 20070154926 | A1 | 20070705 | US 2006-618683 | 20061229 |
| | US 7452672 | B2 | 20081118 | | |
| | US 20070154927 | A1 | 20070705 | US 2006-618693 | 20061229 |
| | US 20070207477 | A1 | 20070906 | US 2006-618688 | 20061229 |
| | US 7449149 | B2 | 20081111 | | |
| | US 20070212709 | A1 | 20070913 | US 2006-618663 | 20061229 |
| | US 7432058 | B2 | 20081007 | | |
| | US 20080268509 | A1 | 20081030 | US 2006-618667 | 20061229 |
| | US 20090118485 | A1 | 20090507 | US 2008-205817 | 20080905 |
| | JP 2009046685 | A | 20090305 | JP 2008-241854 | 20080919 |
| | JP 2009073838 | A | 20090409 | JP 2008-249238 | 20080926 |
| PRAI | US 1996-642330 | A2 | 19960503 | | |
| | US 1996-672196 | A2 | 19960627 | | |
| | US 1996-726462 | A | 19961004 | | |
| | CA 1997-2203494 | A3 | 19970423 | | |
| | EP 1997-303039 | A3 | 19970502 | | |
| | JP 1997-115920 | A3 | 19970506 | | |
| | JP 2000-10931 | A3 | 19970506 | | |
| | JP 2000-10932 | A3 | 19970506 | | |
| | JP 1998-502974 | A3 | 19970521 | | |
| | JP 2002-280013 | A3 | 19970521 | | |
| | US 1998-46203 | A1 | 19980323 | | |
| | US 1999-272097 | A1 | 19990318 | | |
| | US 2000-578920 | A1 | 20000525 | | |
| | US 2001-14743 | A1 | 20011029 | | |
| | JP 2003-288285 | A3 | 20030806 | | |
| | US 2004-788836 | A1 | 20040226 | | |
| | US 2006-617667 | A1 | 20061228 | | |
| | MARPAT 129:212480 | | | | |
| OS | | | | | |
| GI | | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Novel linkers for linking a donor dye to an acceptor dye in an energy transfer fluorescent dye are provided. These linkers facilitate the efficient transfer of energy between a donor and acceptor dye in an energy transfer dye. One of these linkers for linking a donor dye to an acceptor

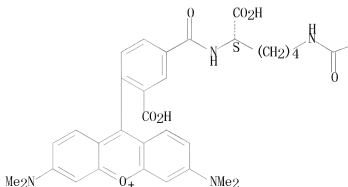
dye in an energy transfer fluorescent dye has the general structure R21Z1C(0)R22R28 where R21 is a C1-5 alkyl attached to the donor dye, C(0) is a carbonyl group, Z1 is either NH, S or O, R22 is a substituent which includes an alkene, diene, alkyne, a five and six membered ring having at least one unsatd. bond or a fused ring structure which is attached to the carbonyl carbon, and R28 includes a functional group which attaches the linker to the acceptor dye. One example dye prepared was 1.

IT 212390-03-9P
 RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (energy transfer dyes with enhanced fluorescence)
 RN 212390-03-9 CAPLUS
 CN Xanthylum, 9-[2-carboxy-4-[[[(1S)-1-carboxy-5-[[[(3', 6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H), 9'-[9H]xanthen]-5-yl)carbonyl]amino]pentyl]amino]carbonyl]phenyl]-3, 6-bis(dimethylamino)- (CA INDEX NAME)

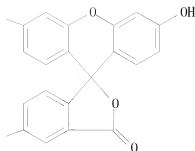
Absolute stereochemistry.

PAGE 1-A

HO



PAGE 1-B



OSC.G 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (25 CITINGS)
 RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 71 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN

AN 1998:103406 CAPLUS

DN 128:25447

OREF 128:50299a,50302a

TI Intramolecular excitonic dimers in protease substrates: Modification of the backbone moiety to probe the H-dimer structure

AU Packard, Beverly Z.; Komoriya, Akira; Nanda, Vikas; Brand, Ludwig

CS Oncolmmunin Inc., College Park, MD, 20742, USA

S0 Journal of Physical Chemistry B (1998), 102(10), 1820-1827

CODEN: JPCBFK; ISSN: 1089-5647

PB American Chemical Society

DT Journal

LA English

AB NorFES (DAIPNISIPKGY, N1 = norleucine) is an undecapeptide that contains a recognition sequence and cleavage site for the serine protease elastase. When NorFES is doubly labeled with a variety of fluorophores on opposite sides of this amino acid sequence, the fluorescence is quenched due to formation of intramol. ground-state dimers. Although the spectral characteristics of these dimers are predictable by exciton theory, influence of the peptide backbone on H-dimer formation is less well understood. Specifically, factors that modify the attractive forces between and orientation of dyes are not well-characterized. Thus, by varying the dye linker moieties, it was sought to evaluate the thermodyn. parameters for intramol. H-type dye-dye association and the structures of these dimers. Data is presented from a series of homo-doubly labeled NorFES derivs. that differ by the addition of one or two 6-aminohexanoic acids to the peptide backbone. By comparing absorption and fluorescence properties of these substrates as a function of temperature, it was examined how such addns. could modify dimerization; the free energy of activation (ΔG , thermodyn.) for intramol. dimer disruption of each substrate was calculated. To gain further insight into dye-dye orientation, a NorFES substrate modified to facilitate intramol. H-dimerization was synthesized with different geometric dye isomers. The data show that length and conformation of the peptide plus linker as well as stereochem. of dye-peptide conjugation play important roles in intramol. ground-state complexation. The factors that influence the spectral properties of intramol. H-dimerization support earlier proposed model for H-dimers in NorFES peptides.

IT 205176-31-4 205176-32-5

RL: PRP (Properties)

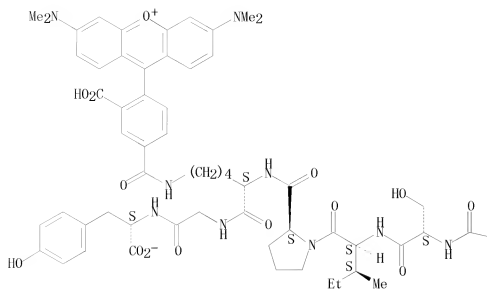
(modification of the backbone moiety to probe the H-dimer structure of intramol. excitonic dimers in protease substrates)

RN 205176-31-4 CAPLUS

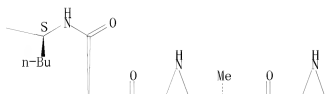
CN L-Tyrosine, N-[4-[3,6-bis(dimethylamino)xanthylum-9-yl]-3-carboxybenzoyl]-L-aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-isoleucyl-L-prolyl-N6-[4-[3,6-bis(dimethylamino)xanthylum-9-yl]-3-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

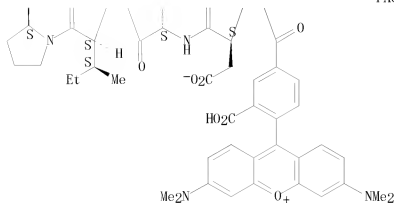
PAGE 1-A



PAGE 1-B



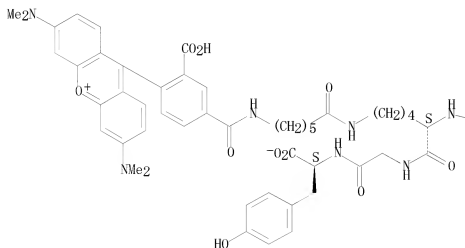
PAGE 2-B



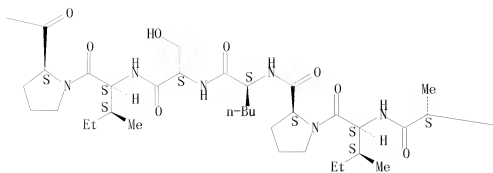
RN 205176-32-5 CAPLUS
 CN L-Tyrosine, N-[4-[3, 6-bis(dimethylamino)xanthylum-9-yl]-3-carboxybenzoyl]-
 L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-
 isoleucyl-L-prolyl-N6-[6-[[4-[3, 6-bis(dimethylamino)xanthylum-9-yl]-3-
 carboxybenzoyl]amino]-1-oxohexyl]-L-lysylglycyl-, bis(inner salt) (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.

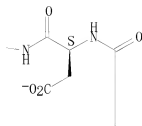
PAGE 1-A



PAGE 1-B



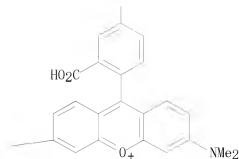
PAGE 1-C



PAGE 2-B

Me₂N

PAGE 2-C



OSC.G 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)
 RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 72 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN

AN 1998:94592 CAPLUS

DN 128:177555

OREF 128:34939a, 34942a

TI Fluorophor double-labeled peptides for detection of protease in biological samples

IN Komoriya, Akira; Packard, Beverly S.

PA OncoImmunin, Inc., USA

SO U.S., 39 pp., Cont.-in-part of U.S. 5,605,809.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|------|----------|-----------------|----------|
| PI | US 5714342 | A | 19980203 | US 1995-549008 | 19951027 |
| | US 5605809 | A | 19970225 | US 1994-331383 | 19941028 |
| | CA 2203758 | A1 | 19960509 | CA 1995-2203758 | 19951027 |
| | AT 323779 | T | 20060515 | AT 1995-938296 | 19951027 |
| PRAI | US 1994-331383 | A2 | 19941028 | | |
| OS | MARPAT 128:177555 | | | | |

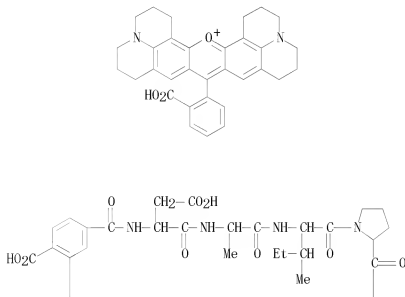
AB The present invention provides for novel reagents whose fluorescence increases in the presence of particular proteases. The reagents comprise a characteristically folded peptide backbone each end of which is conjugated to a fluorophore. When the folded peptide is cleaved, as by digestion with a protease, the fluorophores provide a high intensity

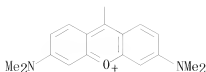
fluorescent signal at a visible wavelength. Because of their high fluorescence signal in the visible wavelengths, these protease indicators are particularly well suited for detection of protease activity in biol. samples, in particular in frozen tissue sections. Thus this invention also provides for methods of detecting protease activity in situ in frozen sections. Many protease inhibitors containing carboxytetramethylrhodamine and rhodamine x acetamide were prepared and tested for their suitability as substrates for elastase. Peptide backbones doubly labeled with a single fluorophore also displayed fluorescence quenching and were suitable as substrates. The latter were used for fluorescence microscopy of fixed epidermal carcinoma cell line A431.

IT 203116-56-7P 203116-57-8P
 RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (fluorophor double-labeled peptides for detection of protease in biol. samples)

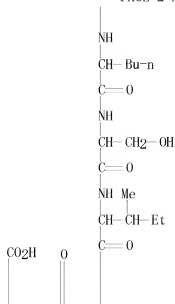
RN 203116-56-7 CAPLUS
 CN L-Cysteine, N-[3-[3,6-bis(dimethylamino)xanthylium-9-yl]-4-carboxybenzoyl]-L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-isoleucyl-L-prolyl-S-[2-[[3(or 4)-carboxy-4(or 3)-(2,3,6,7,12,13,16,17-octahydro-1H,5H,11H,15H-xantheno[2,3,4-ij:5,6,7-i'j']diquinolizin-18-ium-9-yl)phenyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

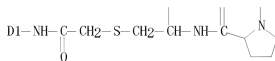




PAGE 2-A



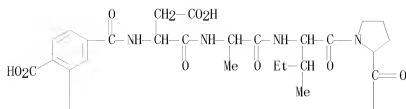
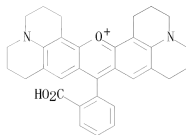
PAGE 3-A



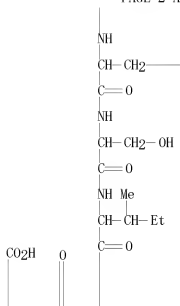
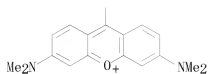
RN 203116-57-8 CAPLUS

CN L-Cysteine, N-[3-[3, 6-bis(dimethylamino)xanthylum-9-yl]-4-carboxybenzoyl]-L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-methionyl-L-seryl-L-isoleucyl-L-prolyl-S-[2-[[3(or 4)-carboxy-4(or 3)-(2, 3, 6, 7, 12, 13, 16, 17-octahydro-1H, 5H, 11H, 15H-xantheno[2, 3, 4-ij:5, 6, 7-i' j']diquinolizin-18-ium-9-yl)phenyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



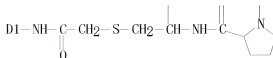
PAGE 2-A



PAGE 2-B



PAGE 3-A



OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
 RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 73 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1998:84174 CAPLUS

DN 128:202567

OREF 128:39995a,39998a

TI Colon cancer diagnosis using fluorescence spectroscopy and fluorescence imaging technique

AU Yova, D.; Atlamazoglou, V.; Davaris, P.; Kavantzaz, N.; Loukas, S.

CS Department of Electrical Engineering & Computing, Applied Biophysics and Biomedical Engineering Laboratory, National Technical University of Athens, Athens, 157 73, Greece

S0 Proceedings of SPIE-The International Society for Optical Engineering (1997), 3197(Optical Biopsies and Microscopic Techniques II), 4-15
 CODEN: PSISDG; ISSN: 0277-786X

PB SPIE-The International Society for Optical Engineering

DT Journal

LA English

AB It is well known that fluorescence spectroscopy can provide information about the differences in the concentration of chromophores in healthy and cancerous tissues. The tumor detection potential can be enhanced by using exogenous fluorescent agents with selective accumulation in cancerous tissue. In this study healthy and cancerous human colon tissue samples were obtained after colon surgery. Excitation - Emission Matrixes were collected using a fluorescence spectrometer. The optimum excitation wavelength was 340 nm. After the acquisition of autofluorescence spectra, the samples were incubated in a solution of 4 µg/mL of Rhodamine analogs. Rhodamine B, Rhodamine 6G and three recently synthesized analogs, were used. For the acquisition of fluorescence images, an endoscopic imaging system was developed. Fluorescence imaging with the concomitant use of Rhodamine analogs revealed a remarkable differentiation of cancerous from healthy colonic mucosa.

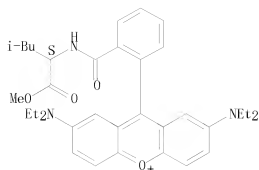
IT 203862-97-9

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (colon cancer diagnosis using fluorescence spectroscopy and fluorescence imaging technique)

RN 203862-97-9 CAPLUS

CN Xanthylum, 2,7-bis(diethylamino)-9-[2-[[[(1S)-1-(methoxycarbonyl)-3-methylbutyl]amino]carbonyl]phenyl]-, chloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



● Cl⁻

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
 RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 74 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN

AN 1997:476258 CAPLUS

DN 127:78231

OREF 127:14897a, 14900a

TI Fluorescent derivatives of paclitaxel and docetaxel with antineoplastic activity, method for producing them and their applications

IN Amat Guerri, Francisco; Souto, Andre; Acuna Fernandez, Alberto Ulises; Andreu Morales, Jose Manuel; Barasoain Blasco, M. Isabel; Abal, Miguel

PA Consejo Superior Investigaciones Cientificas, Spain

SO PCT Int. Appl., 16 pp.

CODEN: PIXXD2

DT Patent

LA Spanish

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9719938 | A1 | 19970605 | WO 1996-ES231 | 19961129 |
| | W: CA, JP, MX, NO, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | ES 2105983 | A1 | 19971016 | ES 1995-2361 | 19951129 |
| | ES 2105983 | B1 | 19980701 | | |
| | ES 2121549 | A1 | 19981116 | ES 1996-2522 | 19961129 |
| | ES 2121549 | B1 | 19990616 | | |
| PRAI | ES 1995-2361 | A | 19951129 | | |
| | ES 1996-2522 | A | 19961129 | | |

AB Intensively fluorescent derivs. have been synthesized from a substance used at present as anticancer (chemotherapy) agent, against ovarian and mammal tumors, and other tumors. Said derivs. enable to visualize the cellular target of said drug, since the derivatization does not modify the biol. activity. There is no existing compound which has the solubility, activity and fluorescence characteristics of the compds. disclosed in the present invention. Said derivs. may be used as fluorescence microscopy colorants specific to microtubules of the cytoskeleton in cells and other living organisms. Said derivs. have many applications in the anal. of cell anatomy and in clin. diagnosis.

IT 191930-57-1P

RL: ARG (Analytical reagent use); SPN (Synthetic preparation); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP

(Preparation); USES (Uses)

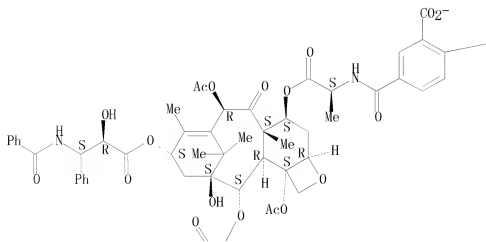
(applications of fluorescent derivs. of paclitaxel and docetaxel with antineoplastic activity and a method for producing them)

RN 191930-57-1 CAPLUS

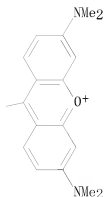
CN Xanthylum, 9-[4-[[[(1S)-2-[[[(2aR, 4S, 4aS, 6R, 9S, 11S, 12S, 12aR, 12bS)-6, 12b-bis(acetyloxy)-9-[(2R, 3S)-3-(benzoylamino)-2-hydroxy-1-oxo-3-phenylpropoxy]-12-(benzoyloxy)-2a, 3, 4, 4a, 5, 6, 9, 10, 11, 12, 12a, 12b-dodecahydro-11-hydroxy-4a, 8, 13, 13-tetramethyl-5-oxo-7, 11-methano-1H-cyclodeca[3, 4]benz[1, 2-b]oxet-4-yl]oxy]-1-methyl-2-oxoethyl]amino]carbonyl]-2-carboxyphenyl]-3, 6-bis(dimethylamino)-, inner salt (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PAGE 2-A



OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L7 ANSWER 75 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1997:439310 CAPLUS

DN 127:161323

OREF 127:31270h, 31271a

TI New crystalline N-(coumarin-4-yl)-L-pyroglutamic acid. The first synthesis and application to 1H NMR optical purity determination of alcohols and amines

AU Nagasawa, Kazuo; Okazaki, Ritsuko; Yamashita, Asami; Ito, Keiichi; Wada, Kohji

CS Hokkaido College of Pharmacy, Otaru, 047-02, Japan

S0 Heterocycles (1997), 45(6), 1047-1050

CODEN: HTCYAM; ISSN: 0385-5414

PB Japan Institute of Heterocyclic Chemistry

DT Journal

LA English

AB Condensation of 3-phenylsulfonyl-4-chlorocoumarin with tert-Bu L-pyroglutamate potassium salt followed by desulfonylation and ester-cleavage yielded the novel crystalline N-(coumarin-4-yl)-L-pyroglutamic acid [CPYRO-OH], which shows evidence of being a versatile and reliable 1H NMR optical purity determination agent for chiral alcs. and amines.

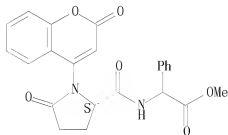
IT 193685-09-5P 193685-10-8P 193685-11-9P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation of coumarinyl-L-pyroglutamic acid and use as chiral derivatizing agent for alcs. and amines)

RN 193685-09-5 CAPLUS

CN Glycine, 5-oxo-1-(2-oxo-2H-1-benzopyran-4-yl)-L-prolyl-, methyl ester (9CI) (CA INDEX NAME)

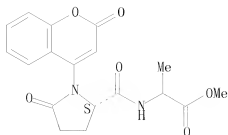
Absolute stereochemistry.



RN 193685-10-8 CAPLUS

CN Alanine, 5-oxo-1-(2-oxo-2H-1-benzopyran-4-yl)-L-prolyl-, methyl ester (9CI) (CA INDEX NAME)

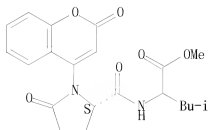
Absolute stereochemistry.



RN 193685-11-9 CAPLUS

CN Leucine, 5-oxo-1-(2-oxo-2H-1-benzopyran-4-yl)-L-prolyl-, methyl ester
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 76 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1996:87653 CAPLUS

DN 124:148952

OREF 124:27661a, 27664a

TI Water-based magenta color recording liquids

IN Yamada, Masahiro; Murata, Jukichi

PA Mitsubishi Kagaku KK, Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

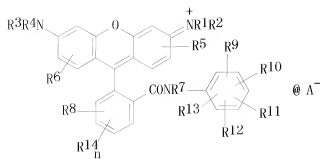
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|------|----------|-----------------|----------|
| PI | JP 07292303 | A | 19951107 | JP 1994-91211 | 19940428 |
| PRAI | JP 1994-91211 | | 19940428 | | |
| OS | MARPAT 124:148952 | | | | |
| GI | | | | | |



I

AB Title storage-stable liqs., useful for paper to give water-resistant printed image, contain water-based mediums and xanthene derivs. I [A = anion; R1-R4 = (un)substituted (cyclo)alkyl; R1 and R2, or R3 and R4 may form saturated heterocyclic ring with N; R5, R6 = H, C1-12 alkyl, halo; R7 = H, (un)substituted (cyclo)alkyl; R8-R13 = H, halo, C1-6 alkyl, C1-6 alkoxy, OH, NO2, carboxy, sulfonic acid; R14 = H, halo; n = 1-3]. Thus, an ink comprising I (A = Cl; R1-R4 = Et; R9 = 2-CO2H; R8, R10-R14 = H) 3, diethylene glycol 10, iso-Pr alc. 3, and water to 100 parts was used in ink-jet printing on paper to give magenta image with high color d.

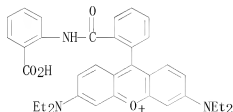
| | | | |
|----|-------------|-------------|-------------|
| IT | 173423-07-9 | 173423-08-0 | 173423-09-1 |
| | 173423-10-4 | 173423-11-5 | 173423-12-6 |
| | 173423-13-7 | 173423-14-8 | 173423-15-9 |
| | 173423-16-0 | 173423-17-1 | 173423-18-2 |
| | 173423-19-3 | 173423-20-6 | 173423-21-7 |
| | 173423-22-8 | 173423-23-9 | 173423-24-0 |
| | 173423-25-1 | 173423-26-2 | 173423-27-3 |
| | 173423-28-4 | 173423-29-5 | 173423-30-8 |
| | 173423-31-9 | 173423-32-0 | 173423-33-1 |
| | 173423-34-2 | 173423-35-3 | 173423-36-4 |
| | 173423-37-5 | 174423-22-4 | |

RL: TEM (Technical or engineered material use); USES (Uses)

(dyes; water-based jet printing inks containing magenta xanthene-type dyes)

RN 173423-07-9 CAPLUS

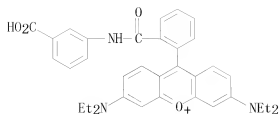
CN Xanthylum, 9-[2-[[[2-(3-carboxyphenyl)amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)



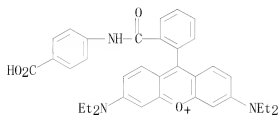
● Cl⁻

RN 173423-08-0 CAPLUS

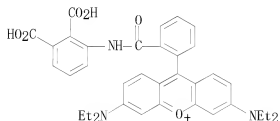
CN Xanthylum, 9-[2-[[[3-carboxyphenyl)amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)

● Cl⁻

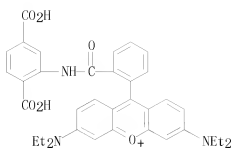
RN 173423-09-1 CAPLUS
 CN Xanthylum, 9-[2-[[[4-carboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)

● Cl⁻

RN 173423-10-4 CAPLUS
 CN Xanthylum, 9-[2-[[[2,3-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)

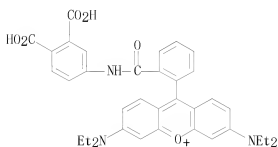
● Cl⁻

RN 173423-11-5 CAPLUS
 CN Xanthylum, 9-[2-[[[2,5-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)



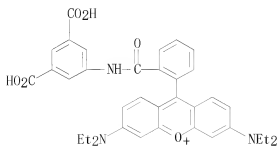
RN 173423-12-6 CAPLUS

CN Xanthylum, 9-[2-[(3,4-dicarboxyphenyl)amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)



RN 173423-13-7 CAPLUS

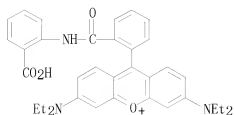
CN Xanthylum, 9-[2-[(3,5-dicarboxyphenyl)amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)



RN 173423-14-8 CAPLUS

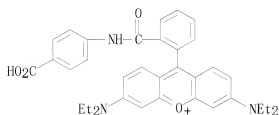
CN Xanthylum, 9-[2-[(2-carboxyphenyl)amino]carbonyl]phenyl]-3,6-

bis(diethylamino)-, bromide (1:1) (CA INDEX NAME)



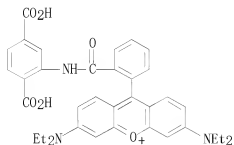
RN 173423-15-9 CAPLUS

CN Xanthylum, 9-[2-[[4-carboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, bromide (1:1) (CA INDEX NAME)



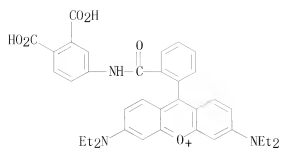
RN 173423-16-0 CAPLUS

CN Xanthylum, 9-[2-[[2,5-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, bromide (1:1) (CA INDEX NAME)

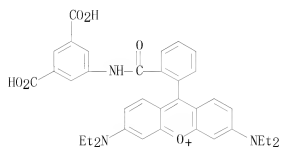


RN 173423-17-1 CAPLUS

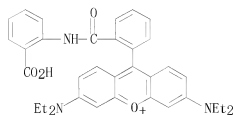
CN Xanthylum, 9-[2-[[3,4-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, bromide (1:1) (CA INDEX NAME)



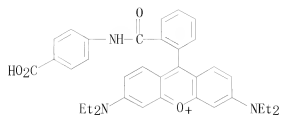
RN 173423-18-2 CAPLUS
 CN Xanthylum, 9-[2-[[3,5-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, bromide (1:1) (CA INDEX NAME)



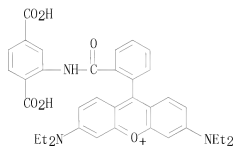
RN 173423-19-3 CAPLUS
 CN Xanthylum, 9-[2-[[2-carboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, iodide (1:1) (CA INDEX NAME)



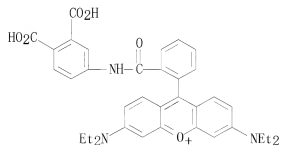
RN 173423-20-6 CAPLUS
 CN Xanthylum, 9-[2-[[4-carboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, iodide (1:1) (CA INDEX NAME)



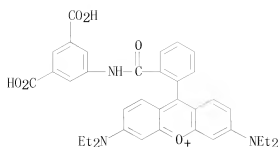
RN 173423-21-7 CAPLUS
 CN Xanthylum, 9-[2-[(2,5-dicarboxyphenyl)amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, iodide (1:1) (CA INDEX NAME)



RN 173423-22-8 CAPLUS
 CN Xanthylum, 9-[2-[(3,4-dicarboxyphenyl)amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, iodide (1:1) (CA INDEX NAME)



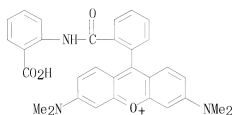
RN 173423-23-9 CAPLUS
 CN Xanthylum, 9-[2-[(3,5-dicarboxyphenyl)amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, iodide (1:1) (CA INDEX NAME)



● I⁻

RN 173423-24-0 CAPLUS

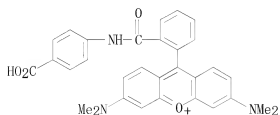
CN Xanthylum, 9-[2-[[[2-carboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, chloride (1:1) (CA INDEX NAME)



● Cl⁻

RN 173423-25-1 CAPLUS

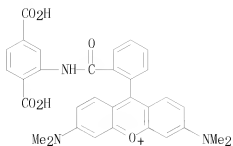
CN Xanthylum, 9-[2-[[[4-carboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, chloride (1:1) (CA INDEX NAME)



● Cl⁻

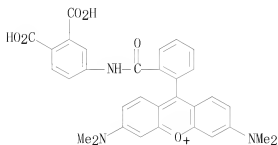
RN 173423-26-2 CAPLUS

CN Xanthylum, 9-[2-[[[2,5-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, chloride (1:1) (CA INDEX NAME)



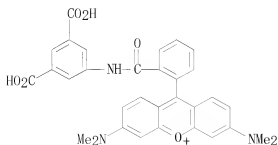
RN 173423-27-3 CAPLUS

CN Xanthylum, 9-[2-[[3,4-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, chloride (1:1) (CA INDEX NAME)



RN 173423-28-4 CAPLUS

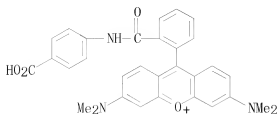
CN Xanthylum, 9-[2-[[3,5-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, chloride (1:1) (CA INDEX NAME)



RN 173423-29-5 CAPLUS

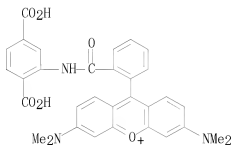
CN Xanthylum, 9-[2-[[4-carboxyphenyl]amino]carbonyl]phenyl]-3,6-

bis(dimethylamino)-, bromide (1:1) (CA INDEX NAME)



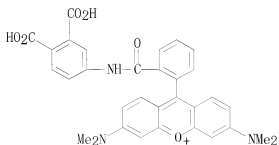
RN 173423-30-8 CAPLUS

CN Xanthylum, 9-[2-[(2,5-dicarboxyphenyl)amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, bromide (1:1) (CA INDEX NAME)



RN 173423-31-9 CAPLUS

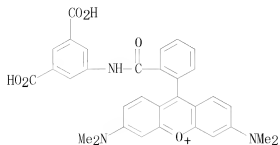
CN Xanthylum, 9-[2-[(3,4-dicarboxyphenyl)amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, bromide (1:1) (CA INDEX NAME)



RN 173423-32-0 CAPLUS

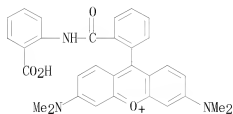
CN Xanthylum, 9-[2-[(3,5-dicarboxyphenyl)amino]carbonyl]phenyl]-3,6-

bis(dimethylamino)-, bromide (1:1) (CA INDEX NAME)



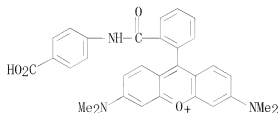
RN 173423-33-1 CAPLUS

CN Xanthylum, 9-[2-[[[(2-carboxyphenyl)amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, iodide (1:1) (CA INDEX NAME)



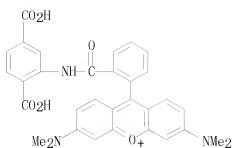
RN 173423-34-2 CAPLUS

CN Xanthylum, 9-[2-[[[(4-carboxyphenyl)amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, iodide (1:1) (CA INDEX NAME)

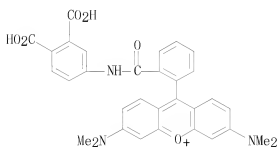


RN 173423-35-3 CAPLUS

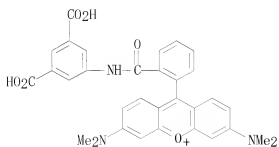
CN Xanthylum, 9-[2-[[[(2,5-dicarboxyphenyl)amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, iodide (1:1) (CA INDEX NAME)



RN 173423-36-4 CAPLUS
 CN Xanthylum, 9-[2-[[3,4-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, iodide (1:1) (CA INDEX NAME)

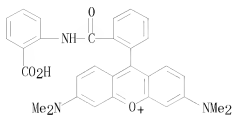


RN 173423-37-5 CAPLUS
 CN Xanthylum, 9-[2-[[3,5-dicarboxyphenyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, iodide (1:1) (CA INDEX NAME)



RN 174423-22-4 CAPLUS
 CN Xanthylum, 9-[2-[[2-carboxyphenyl]amino]carbonyl]phenyl]-3,6-

bis(dimethylamino)-, bromide (1:1) (CA INDEX NAME)



L7 ANSWER 77 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1996:48115 CAPLUS

DN 124:146494

OREF 124:27261a, 27264a

| | |
|----|---|
| TI | New fluorescent water-soluble taxol derivatives |
|----|---|

AU Souto, Andre A.; Acuna, A. Ulises; Andreu, Jose M.; Barasoain, Isabel;

Abal, Miguel; Amat-Guerri, Francisco

CS Inst. Quim. Org., CSIC, Madrid, E-28006, Spain

S0 Angewandte Chemie, International Edition in English (1996), Volume Date

1995, 34 (23/24), 2710-12

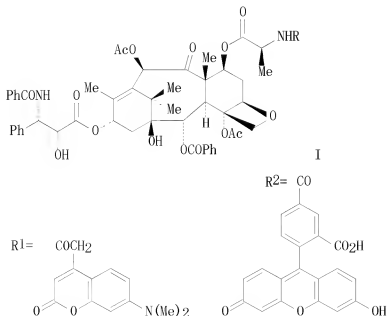
CODEN: ACIEAY; ISSN: 0570-0833

PB VCH

DT Journal

LA English

GI

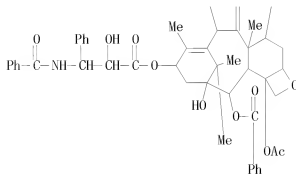
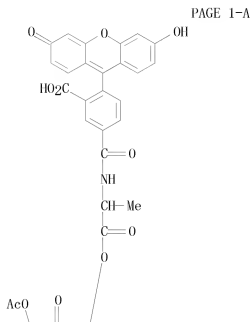


AB Here we report the synthesis and characterization of two new bioactive
fluorescent taxol derivs., I (R = R1, R2), and provide an example of their
use in the first direct visualization of the taxol-microtubule system in
cultured cells.

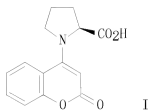
IT 173355-20-9P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and properties of new fluorescent water-soluble taxol derivs.)

RN 173355-20-9 CAPLUS

CN L-Alanine, N-[3-carboxy-4-(6-hydroxy-3-oxo-3H-xanthen-9-yl)benzoyl]-,
6,12b-bis(acetyloxy)-9-[3-(benzoylamino)-2-hydroxy-1-oxo-3-phenylpropoxy]-
12-(benzoyloxy)-2a, 3, 4, 4a, 5, 6, 9, 10, 11, 12, 12a, 12b-dodecahydro-11-hydroxy-
4a, 8, 13, 13-tetramethyl-5-oxo-7, 11-methano-11H-cyclodeca[3, 4]benz[1, 2-b]oxet-
4-yl ester, [2aR-[2a α , 4 β , 4a β , 6 β , 9 α (2R*, 3S*)], 11.
alpha., 12 α , 12a α , 12b α]]- (9CI) (CA INDEX NAME)

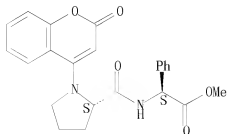


L7 ANSWER 78 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 1995:440289 CAPLUS
 DN 123:112654
 OREF 123:20145a, 20148a
 TI N-Coumarinyl-L-proline, a novel chiral derivatizing agent for ¹H NMR determination of enantiomeric purities of alcohols and amines
 AU Nagasawa, Kazuo; Yamashita, Asami; Katoh, Satoru; Ito, Keiichi; Wada, Kohji
 CS Hokkaido Coll. Pharmacy, Otaru, 047-02, Japan
 SO Chemical & Pharmaceutical Bulletin (1995), 43(2), 344-6
 CODEN: CPBTAL; ISSN: 0009-2363
 PB Pharmaceutical Society of Japan
 DT Journal
 LA English
 OS CASREACT 123:112654
 GI



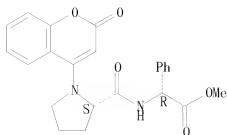
AB Title compound I, readily prepared from proline tert-Bu ester and 4-chlorocoumarin, was proved to be an efficient and useful chiral derivatizing agent by ¹H NMR inspection of the resulting diastereomeric esters and amides.
 IT 165821-36-3P 165821-37-4P 165821-38-5P
 165821-39-6P 165821-40-9P 165821-41-0P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation of coumarinyl-L-proline, as chiral derivatizing agent for proton NMR determination of enantiomeric purities of alcs. and amines)
 RN 165821-36-3 CAPLUS
 CN Glycine, N-[1-(2-oxo-2H-1-benzopyran-4-yl)-L-prolyl]-L-2-phenyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 165821-37-4 CAPLUS
 CN Glycine, N-[1-(2-oxo-2H-1-benzopyran-4-yl)-L-prolyl]-D-2-phenyl-, methyl ester (9CI) (CA INDEX NAME)

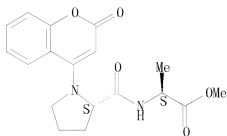
Absolute stereochemistry.



RN 165821-38-5 CAPLUS

CN L-Alanine, N-[1-(2-oxo-2H-1-benzopyran-4-yl)-L-prolyl]-, methyl ester
(9CI) (CA INDEX NAME)

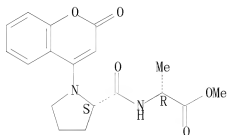
Absolute stereochemistry.



RN 165821-39-6 CAPLUS

CN D-Alanine, N-[1-(2-oxo-2H-1-benzopyran-4-yl)-L-prolyl]-, methyl ester
(9CI) (CA INDEX NAME)

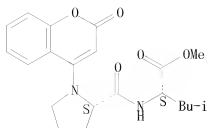
Absolute stereochemistry.



RN 165821-40-9 CAPLUS

CN L-Leucine, N-[1-(2-oxo-2H-1-benzopyran-4-yl)-L-prolyl]-, methyl ester
(9CI) (CA INDEX NAME)

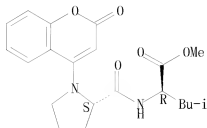
Absolute stereochemistry.



RN 165821-41-0 CAPLUS

CN D-Leucine, N-[1-(2-oxo-2H-1-benzopyran-4-yl)-L-prolyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L7 ANSWER 79 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1993:665054 CAPLUS

DN 119:265054

OREF 119:47285a, 47288a

TI Site-directed double fluorescent tagging of human renin and collagenase (MMP-1) substrate peptides using the periodate oxidation of N-terminal serine. An apparently general strategy for provision of energy-transfer substrates for proteases

AU Geoghegan, Kieran F.; Emery, Michael J.; Martin, William H.; McColl, Alexander S.; Daumy, Gaston O.

CS Cent. Res. Div., Pfizer Inc., Groton, CT, 06340, USA

S0 Bioconjugate Chemistry (1993), 4(6), 537-44

CODEN: BCCHE5; ISSN: 1043-1802

DT Journal

LA English

AB Periodate in neutral aqueous solution rapidly converts N-terminal Ser or Thr to an α -N-glyoxylyl moiety that can serve as the locus for incorporation of a modifying group. The usefulness of this procedure has been further illuminated in a route to "energy-transfer" substrates for endoproteases. Each such substrate is an oligopeptide cleavable by a proteinase, but modified (usually at its termini) with two chromophores that form an energy donor-acceptor pair. Production of these substrates is an exercise in double site-directed peptide modification. The new route is composed of three steps, beginning from an unprotected peptide in which a sequence recognized by the pertinent enzyme is placed between N-terminal Ser and C-terminal Lys. Lys may not occur elsewhere in the peptide. Periodate oxidation converts the N-terminal Ser to an α -N-glyoxylyl group, which is then allowed to form a hydrazone with the carbohydrazide derivative Lucifer Yellow CH, a hydrophilic fluor with a large Stokes shift (excitation maximum, 425 nm; emission maximum, 525 nm). Finally, the modified

peptide is allowed to react with 5-carboxytetramethylrhodamine succinimidyl ester. This reaction selectively modifies the ϵ -amino group of C-terminal Lys, the only amino group remaining in the peptide. 5-Carboxytetramethylrhodamine strongly (>90%) quenches Lucifer Yellow fluorescence by resonance energy transfer in the intact substrate, but enzyme-catalyzed cleavage eliminates the quenching. The resulting increase in fluorescence may be used to follow the hydrolytic reaction. New substrates for human renin and fibroblast collagenase (matrix metalloproteinase-1) have been made to illustrate the procedure. Each was characterized by structural, spectroscopic, and kinetic methods and furnished a continuous fluorescence-based assay for its respective proteinase. It appears that the scheme can be applied to the preparation of comparable substrates for other proteinases.

IT 151368-68-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

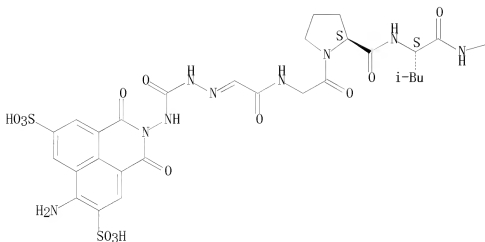
(preparation and reaction with matrix metalloproteinase 1 of human of, proteinase determination by continuous fluorescence-based assay in relation to)

RN 151368-68-2 CAPLUS

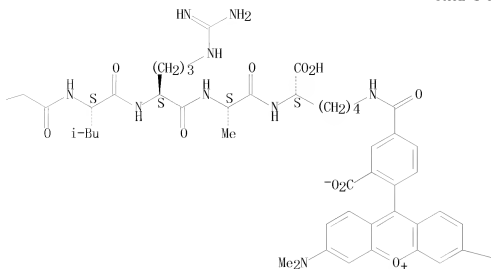
CN L-Lysine, N2-[N-[N2-[N-[N-[1-[N-[[[(6-amino-1,3-dioxo-5,8-disulfo-1H-benz[de]isoquinolin-2(3H)-yl)amino]carbonyl]hydrazono]acetyl]glycyl]-L-prolyl]-L-leucyl]glycyl]-L-leucyl]-L-arginyl]-L-alanyl]-N6-[4-[3,6-bis(dimethylamino)xanthylium-9-yl]-3-carboxybenzoyl]-, inner salt (9CI)
(CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



PAGE 1-B



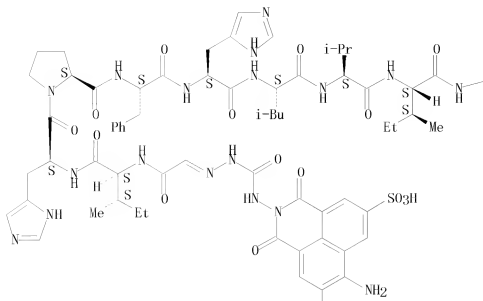
PAGE 1-C

 —NMe_2

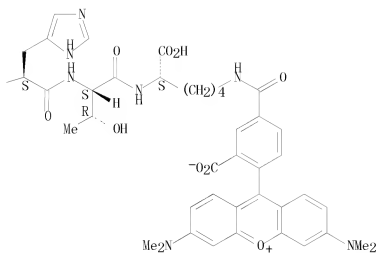
| | |
|----|---|
| IT | 151368-64-8P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and reaction with renin of human of, proteinase determination by continuous fluorescence-based assay in relation to) |
| RN | 151368-64-8 CAPLUS |
| CN | L-Lysine, N2-[N-[N-[N-[N-[N-[N-[N-[[[(6-amino-1,3-dioxo-5,8-disulfo-1H-benz[de]isoquinolin-2(3H)-yl)amino]carbonyl]hydrazono]acetyl]-L-isoleucyl]-L-histidyl]-L-prolyl]-L-phenylalanyl]-L-histidyl]-L-leucyl]-L-valyl]-L-isoleucyl]-L-histidyl]-L-threonyl]-N6-[4-[3,6-bis(dimethylamino)xanthylium-9-yl]-3-carboxybenzoyl]-, inner salt (9CI) (CA INDEX NAME) |

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



PAGE 1-B



PAGE 2-A



OSC.G 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)

L7 ANSWER 80 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1993:490472 CAPLUS

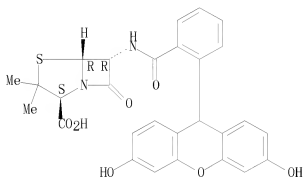
DN 119:90472

OREF 119:16177a,16180a

TI A new, highly sensitive method for the detection and quantification of

penicillin-binding proteins
 AU Galleni, Moreno; Lakaye, Bernard; Lepage, Sophie; Jamin, Marc; Thamm,
 Iris; Joris, Bernard; Frere, Jean Marie
 CS Cent. Ing. Prot., Univ. Liege, Sart-Tilman, B-4000, Belg.
 SO Biochemical Journal (1993), 291(1), 19-21
 CODEN: BIJOAK; ISSN: 0306-3275
 DT Journal
 LA English
 AB A new method for the identification and quantification of
 penicillin-binding proteins is described which uses fluorescein-coupled
 penicillins. It allows the rapid detection of 0.2 pmol with the naked eye
 and 2 fmol with the help of an A.L.F. automatic DNA sequencer. Direct
 labeling can also be performed on whole bacterial cells.
 IT 149202-80-2
 RL: ANST (Analytical study)
 (in penicillin-binding proteins determination by fluorometry)
 RN 149202-80-2 CAPLUS
 CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,
 6-[[2-(3,6-dihydroxy-9H-xanthen-9-yl)benzoyl]amino]-3,3-dimethyl-7-oxo-,
 [2S-(2 α ,5 α ,6 β)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)

L7 ANSWER 81 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN
 AN 1991:160953 CAPLUS
 DN 114:160953
 OREF 114:27139a, 27142a
 TI Artificial increase of the light-harvesting ability of photosynthetic
 units in isolated chloroplasts
 AU Sorokin, E. M.; Bobylev, G. S.; Molotkovskii, Y. G.
 CS K. A. Timiryazev Inst. Plant Physiol., Moscow, 127276, USSR
 SO Photosynthesis Research (1990), 26(2), 87-91
 CODEN: PHRSDI; ISSN: 0166-8595
 DT Journal
 LA English
 AB A synthetic fluorochromous lipid, rhodaminy triglyceride (rhodaminy TG),
 was intercalated into isolated thylakoid membranes of chloroplasts up to
 30 mols./100 mols. chlorophyll. An absorption band appeared in the
 yellow-green spectrum, its intensity being comparable with the red and
 blue chlorophyll bands. The energy absorbed by rhodaminy TG was
 transferred through chlorophyll to the reaction centers of photosystems I
 and II, inducing an addnl. electron flow of .apprx.30%. The exogenous
 fluorochromes dissolved in the lipid function as accessory pigment which
 significantly modifies the spectral sensitivity of the photosynthetic
 process. The energy transfer from rhodaminy TG to chlorophyll occurs by

a mechanism of the inductive resonance type.

IT 133179-33-6

RL: BIOL (Biological study)

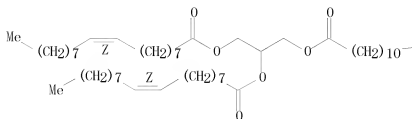
(light-harvesting energy transfer enhancement by, intercalated into thylakoids)

RN 133179-33-6 CAPLUS

CN Xanthylum, 9-[4-[[[11-[2,3-bis[[[(9Z)-1-oxo-9-octadecen-1-yl]oxy]propoxy]-11-oxoundecyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, chloride (1:1) (CA INDEX NAME)

Double bond geometry as shown.

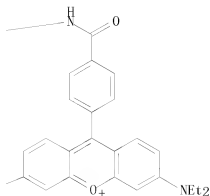
PAGE 1-A



Et₂N

● Cl⁻

PAGE 1-B



L7 ANSWER 82 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1991:38439 CAPLUS

DN 114:38439

OREF 114:6623a, 6626a

TI Peptidylchloromethyl ketone substrates for the detection of catalytically

active serine proteases byimmuno assay
 IN Mann, Kenneth G.; Williams, Brady; Tracy, Russell P.
 PA University of Vermont and State Agricultural College, USA
 SO PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 9003577 | A1 | 19900405 | WO 1989-US4192 | 19890926 |
| | W: JP | | | | |
| | RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE | | | | |
| | EP 436654 | A1 | 19910717 | EP 1989-911689 | 19890926 |
| | R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE | | | | |
| | JP 04501460 | T | 19920312 | JP 1989-510877 | 19890926 |
| | US 6242173 | B1 | 20010605 | US 1992-833646 | 19920207 |
| PRAI | US 1988-252506 | A | 19880930 | | |
| | WO 1989-US4192 | W | 19890926 | | |

OS MARPAT 114:38439

AB Substituted peptidyl-chloromethyl ketone derivs. are irreversible inhibitors of serine proteinases. The peptide (1-3 amino acids) gives the compound specificity for the active site of a particular proteinase. Substitution with a reporting group (e.g. biotin, a fluorophore) allows these substrates to be used in immunoassays for catalytically active serine proteinases. These reagents measure active sites rather than cross-reacting material (e.g. zymogens) and are therefore particularly suitable for the determination of serine proteinase activity of blood coagulation factors. Biotinyl-ε-aminocaproyl-D-phenylalanyl-L-prolyl-L-arginine chloromethyl ketone (BC-PPACK) was synthesized by standard chemical and coupled to tissue-type plasminogen activator (tPA) to give tPA-BCPPACK. This was bound to avidin coated microtiter plates and the bound tPA measured by immunoassay using peroxidase-coupled antibody. The standard curve showed a lower limit of sensitivity of 2 ng tPA/mL with test samples of 500 ng tPA/mL accurately measured.

IT 121593-25-7

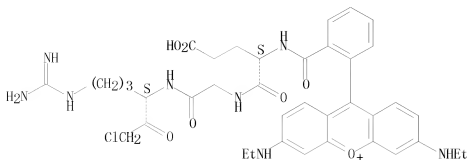
RL: BIOL (Biological study)

(active site-specific fluorescent reagent for serine proteinases, immunoassays in relation to)

RN 121593-25-7 CAPLUS

CN Glycinamide, N-[2-[3,6-bis(ethylamino)xanthylium-9-yl]benzoyl]-L-α-glutamyl-N-[4-[(aminoiminomethyl)amino]-1-(chloroacetyl)butyl]-, chloride, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● Cl⁻

OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
 RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 83 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1989:590099 CAPLUS

DN 111:190099

OREF 111:31511a, 31514a

TI Zymogen/enzyme discrimination using peptide chloromethyl ketones

AU Williams, E. Brady; Krishnaswamy, Sriram; Mann, Kenneth G.

CS Health Sci. Complex, Univ. Vermont, Burlington, VT, 05405, USA

S0 Journal of Biological Chemistry (1989), 264(13), 7536-45

CODEN: JBCHA3; ISSN: 0021-9258

DT Journal

LA English

AB Glutamylglycylarginyl chloromethyl ketone, tyrosylglycylarginyl chloromethyl ketone, and phenylalanylprolylarginyl chloromethyl ketone have been labeled at their N termini using fluorescein, rhodamine-X, lissamine-rhodamine, pyrene, and the 1,5-, 2,5-, and 2,6-dimethylaminonaphthalene-1-sulfonyl moieties. These peptidyl chloromethyl ketones have also been modified by incorporation of biotin and 6-amino caproyl biotin. The ability of these various chloromethyl ketones to be incorporated into a collection of zymogen-enzyme pairs has been evaluated using a variety of coagulation and fibrinolytic proteins. All labeled chloromethyl ketones were efficiently incorporated into the proteases tested, with the exception of urokinase which was refractory to inhibition by phenylalanylprolylarginyl chloromethyl ketone derivs. No modification of any zymogen species was observed even under conditions designed to detect minimal reactivity. When enzymes were modified using chloromethyl ketones labeled with 6-amino caproylbiotin, the modified proteins readily reacted with avidin under a variety of different conditions. The observed reactivity with avidin was used in enzyme blotting following electrophoretic resolution of polypeptide chains and to remove active enzyme present in enzyme-zymogen mixts. These reagents have been used to evaluate the potential for active site expression by the single-chain human factor VII mol. Studies conducted with tissue factor, phospholipids, and Ca using factor X as substrate demonstrate that no activity can be obtained without initial activation of either factor X to factor Xa or factor VII to factor VIIa by an external source. Thus, factor VII is a true zymogen, inert in the blood clotting process prior to its cleavage to factor VIIa.

IT 121593-25-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

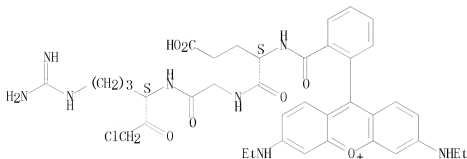
(Reactant or reagent)

(preparation and reaction with blood coagulation and fibrinolysis
zymogen-proteinase pairs of human, zymogen-enzyme discrimination in
relation to)

RN 121593-25-7 CAPLUS

CN Glycinamide, N-[2-[3,6-bis(ethylamino)xanthylum-9-yl]benzoyl]-L- α -
glutamyl-N-[4-[(aminoiminomethyl)amino]-1-(chloroacetyl)butyl]-, chloride,
(S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● Cl⁻

OSC.G 22 THERE ARE 22 CAPLUS RECORDS THAT CITE THIS RECORD (23 CITINGS)

L7 ANSWER 84 OF 87 CAPLUS COPYRIGHT 2009 ACS ON STN

AN 1982:542974 CAPLUS

DN 97:142974

OREF 97:23799a, 23802a

TI Tuftsin analogs for probing its specific receptor site on phagocytic cells

AU Gottlieb, Philip; Beretz, Alain; Fridkin, Mati

CS Dep. Org. Chem., Weizmann Inst. Sci., Rehovot, IL-76-100, Israel

S0 European Journal of Biochemistry (1982), 125(3), 631-8

CODEN: EJBICAT; ISSN: 0014-2956

DT Journal

LA English

AB Six new analogs of the phagocytosis-stimulating peptide tuftsin were synthesized with the eventual aim of characterizing and isolating the tuftsin receptor. These analogs can be classified as follows: (1) photoaffinity labeling analogs for the specific covalent attachment to the tuftsin receptor; (2) fluorescent analogs containing either rhodamine or dansyl fluorescent probes for microscopic visualization of the tuftsin receptor; (3) biotin analog for separation and purification of the receptor by affinity methods. The various synthetic pathways employed to introduce sensitive prosthetic groups into the tuftsin mol. while preserving its biol. activity are described herein. Activities of the various analogs synthesized as compared to tuftsin in biol. and receptor-binding assays are described. All analogs are able to stimulate phagocytosis of the macrophage cell as well as compete specifically for tuftsin binding sites on these cells.

IT 83103-14-4P

RL: PREP (Preparation)

(preparation of, as rhodamine analog of tuftsin)

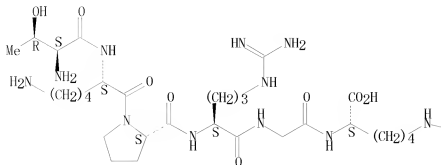
RN 83103-14-4 CAPLUS

CN L-Lysine, N6-[2-[3,6-bis(dimethylamino)xanthylum-9-yl]-5-
isothiocyanatobenzoyl]-N2-[N-[N2-[1-(N2-L-threonyl-L-lysyl)-L-prolyl]-L-

arginyl]glycyl]-, chloride (9CI) (CA INDEX NAME)

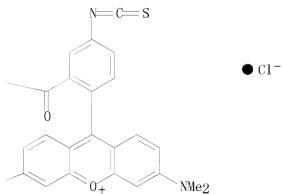
Absolute stereochemistry.

PAGE 1-A



Me₂N

PAGE 1-B



OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

L7 ANSWER 85 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1982:511439 CAPLUS

DN 97:111439

OREF 97:18541a, 18544a

TI Water-thinned inks

PA Pentel Co., Ltd., Japan

SO Jpn. Kokai Tokyo Koho, 5 pp.

CODEN: JKXXAF

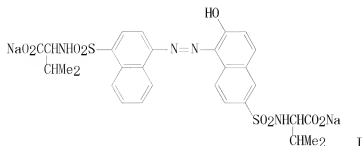
DT Patent

LA Japanese

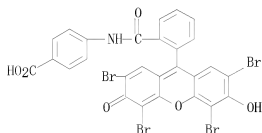
FAN, CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|-------|-------|-----------------|-------|
| _____ | _____ | _____ | _____ | _____ |

PI JP 57059969 A 19820410 JP 1980-135557 19800929
 JP 64000429 B 19890106
 PRAI JP 1980-13557 19800929
 GI



AB Water-thinned inks giving water-resistant prints contain water-miscible organic solvents and amino acid-modified acid dyes. For example, a washable red ink was prepared from the azo dye I [82848-26-8] 10, HOCH2CH2OH 20, and water 70 parts.
 IT 82848-25-7
 RL: USES (Uses)
 (dyes, for washable inks)
 RN 82848-25-7 CAPLUS
 CN Benzoic acid, 4-[[2-(2, 4, 5, 7-tetrabromo-6-hydroxy-3-oxo-3H-xanthen-9-yl)benzoyl]amino]-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L7 ANSWER 86 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 1980:600496 CAPLUS
 DN 93:200496
 OREF 93:31931a, 31934a
 TI Cell lineage analysis by intracellular injection of fluorescent tracers
 AU Weisblat, David A.; Zackson, Saul L.; Blair, Seth S.; Young, Janis D.
 CS Dep. Mol. Biol., Univ. California, Berkeley, CA, 94720, USA
 SO Science (Washington, DC, United States) (1980), 209(4464), 1538-41
 CODEN: SCIEAS; ISSN: 0036-8075
 DT Journal
 LA English
 AB Cell lineages during development of the leech *Helobdella triserialis* are revealed by injection of a fluorescent peptide, rhodamine-D-peptide, into

identified embryonic cells. Use of this peptide together with a nuclear stain shows a stereotypic cleavage pattern of stem cells and their progeny. Combined injection of rhodamine-D-peptide and Pronase demonstrates the arrest of stem cell production in the Pronase-injected teloblast.

IT 75403-31-5

RL: ANST (Analytical study)

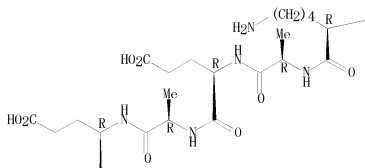
(in cell lineage anal., in embryo of leech)

RN 75403-31-5 CAPLUS

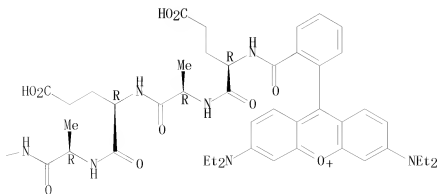
CN Glycine, N-[N2-[N-[N-[N-[N-[N-[N2-[N-[N-[N-[2-[3,6-bis(diethylamino)xanthylium-9-yl]benzoyl]-D- α -glutamyl]-D-alanyl]-D- α -glutamyl]-D-alanyl]-D-lysyl]-D-alanyl]-D- α -glutamyl]-D-alanyl]-D- α -glutamyl]-D-lysyl]-, chloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

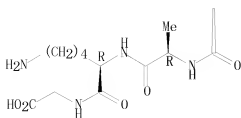
PAGE 1-A



PAGE 1-B



PAGE 2-A

● Cl⁻

OSC.G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

L7 ANSWER 87 OF 87 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1964:454876 CAPLUS

DN 61:54876

OREF 61:9503f-h,9504a-c

TI 6-Aminopenicillanic acid derivatives

IN Feher, Odon; Vargha, Laszlo; Horvath, Istvan

PA Gyogyszeripari Kutato Intezet

SO 10 pp.

DT Patent

LA Unavailable

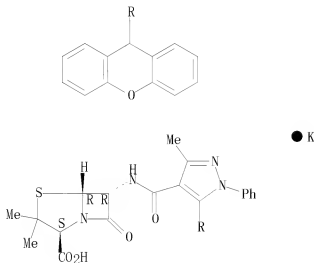
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | HU 151436 | | 19640623 | HU | 19621115 |
| PRAI | HU | | 19621115 | | |
| AB | <p>A solution of 40 g. 1,5-diphenyl-3-methylpyrazole-4-carbonyl chloride in 240 ml. Me₂CO was added dropwise with stirring to a mixture of 29 g. 6-aminopenicillanic acid (I) in 870 ml. 5% aqueous NaHCO₃ solution and 630 ml. Me₂CO at 0°, the mixture stirred 1 hr. at 0° and 1 hr. at 20-5° and filtered, the filtrate concentrated in vacuo at room temperature and extracted with Et₂O, the aqueous phase treated with H₃PO₄ at 0° to pH 2, and extracted with Et₂O, the organic phase washed with H₂O and extracted with aqueous NaHCO₃, the aqueous phase evaporated to dryness in vacuo at room temperature, and the residue treated with Me₂CO to yield 35-40 g. 1,5-diphenyl-3-methyl-4-pyrazolylpenicillin Na salt, 94-9% pure, m. 250-5° (decomposition) (H₂O, Me₂CO-Et₂O), [α]_D²⁰ 111.6° (c 2, H₂O). A mixture of 3.82 g. 1,3diphenyl-5-methylpyrazole-4-carboxylic acid, 30 ml. absolute Me₂CO, and 1.44 ml. Et₃N was treated with stirring at 0° with 1.31 ml. ClCO₂Bu-iso, the mixture stirred 30 min. at 0°, a solution of 2.16 g. I in 20 ml. H₂O and 1.44 ml. Et₃N added, the whole stirred 1 hr. at room temperature, 15 ml. 5% aqueous NaHCO₃ solution added, and the mixture extracted with Et₂O, treated with H₃PO₄ at 0° to pH 2, and worked up as above to yield 1,3-diphenyl-5-methyl-4-pyrazolylpenicillin Na salt. 1,3,5-Triphenyl-4-pyrazolylpenicillin Na salt (59.5% pure) and 1-phenyl-3-methyl-5-(3,4,5-trimethoxyphenyl)-4-pyrazolylpenicillin Na salt were similarly prepared as in the 1st example. 1,3,5-Triphenylpyrazole carbonyl chloride, m. 125-7°, was prepared from the acid with SOCl₂. The reaction of Et α-(9-xanthenecarbonyl)acetoacetate and PhNHNH₂ gave 1-phenyl-3-methyl-5-(9-xanthenyl)-4-ethoxycarbonylpyrazole; hydrolysis of this gave the corresponding acid, m. 229-31°, which treated with SOCl₂ gave the acid chloride (II), m. 159-61°. 1-Phenyl-3-methyl-5-(3,4,5-trimethoxyphenyl)pyrazolylcarbonyl chloride, m. 125-6°, was prepared similarly from the acid, m. 214-16°. A solution of 0.93 g. II in 36 ml. Me₂CO was added as above to 0.5 g. I in 12</p> | | | | |

ml. 5% aqueous NaHCO₃ solution and 12 ml. Me₂CO at 0°, the mixture stirred 30 min. at 10°, Me₂CO removed in vacuo at room temperature, the residue extracted with Et₂O, the aqueous phase treated with H₃PO₄ at 0° (pH 2), and extracted again with Et₂O, and the organic phase washed, dried, and mixed with a solution of 0.32 g. K heptane-3-carboxylate (III) in 1 ml. BuOH to precipitate 0.9-1.0 g. 1-phenyl-3-methyl-5-(9-xanthenyl)-4-pyrazolylpenicillin K salt, 74-7% pure. 1-Phenyl-3-methyl-5-(5-methyl-4-isoxazolyl)-4-pyrazolylpenicillin K salt was similarly prepared; the acid chloride was prepared from the corresponding acid, m. 149-51°, with SOCl₂. A solution of 1-phenyl-3-methyl-5-[3-methyl-5-(9-xanthenyl)-4-isoxazolyl]-4-pyrazolylcarbonyl chloride, m. 186-8° (acid Et ester m. 145-7°) in 50 ml. absolute CHCl₃ was added to a mixture of 0.9 g. I in 20 ml. absolute CHCl₃ and 1.2 ml. Et₃N, the mixture stirred 2 hrs., filtered, and washed with dilute H₃PO₄ and H₂O at 0°, the organic phase dried, a solution of 0.64 g. III in 3 ml. BuOH added, and the solvent removed in vacuo to yield 1-phenyl-3-methyl-5-[3-methyl-5-(9-xanthenyl)-4-isoxazolyl]-4-pyrazolylpenicillin K salt, 68.5% pure. Purity detns. were carried out according to I. F. Alicino, Ind. English Chemical Anal. Ed. 18, 619(1946).

IT 105342-15-2P, 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 3,3-dimethyl-6-(3-methyl-1-phenyl-5-xanthen-9-ylpyrazole-4-carboxamido)-7-oxo-, potassium salt
 RL: PREP (Preparation)
 (preparation of)
 RN 105342-15-2 CAPLUS
 CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 3,3-dimethyl-6-(3-methyl-1-phenyl-5-xanthen-9-ylpyrazole-4-carboxamido)-7-oxo-, potassium salt (7CI) (CA INDEX NAME)

Absolute stereochemistry.



=> d his full

(FILE 'HOME' ENTERED AT 13:35:26 ON 28 JUL 2009)

FILE 'REGISTRY' ENTERED AT 13:35:52 ON 28 JUL 2009

L1 STRUCTURE UPLOADED

D

L2 0 SEA SSS SAM L1

L3 245 SEA SSS FUL L1

L4 127 SEA ABB=ON PLU=ON L3 AND ED<12/18/2003
L5 125 SEA ABB=ON PLU=ON L4 AND CAPLUS/LC
L6 2 SEA ABB=ON PLU=ON L4 NOT L5
D 1-2 IDE CAN

L7 FILE 'CAPLUS' ENTERED AT 13:39:05 ON 28 JUL 2009
87 SEA ABB=ON PLU=ON L3
D 1-87 BIB ABS HITSTR

FILE HOME

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 26 JUL 2009 HIGHEST RN 1169218-44-3
DICTIONARY FILE UPDATES: 26 JUL 2009 HIGHEST RN 1169218-44-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

FILE CAPLUS

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 28 Jul 2009 VOL 151 ISS 5
FILE LAST UPDATED: 27 Jul 2009 (20090727/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2009

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2009.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

The ALL, BIB, MAX, and STD display formats in the CA/Caplus family

of databases have been updated to include new citing references information. This enhancement may impact record import into database management software. For additional information, refer to NEWS 22.

=> log h

COST IN U. S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 492.18 | 695.00 |

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| -71.34 | -71.34 |

CA SUBSCRIBER PRICE

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 13:40:40 ON 28 JUL 2009